ROAD SAFETY EDUCATION

GRADE 6
TEACHER'S BOOK

Mauritius Institute of Education
under the aegis of
Ministry of Education, Tertiary Education, Science and Technology
&
Ministry of Land Transport and Light Rail
(Traffic Management and Road Satefy Unit - TMRSU)

ROAD SAFETY EDUCATION

GRADE 6
TEACHER'S BOOK

Name: _____

Class: _____

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Foreword

The Mauritius Institute of Education has embarked upon the production of a set of textbooks for pupils at primary level to enable the implementation of the Road Safety Education (RSE) Curriculum. The textbooks have been designed according to different levels to suit the developmental profile of young learners as specified in the National Curriculum Framework/ Teaching and Learning Syllabus. The teaching and learning materials are practically oriented and consist of a range of activities to engage pupils with the road traffic system in their roles as a passenger, pedestrian and/or cyclist. To ensure that the teaching and learning materials align with the technical skillsthat road users need to develop, the textbooks have been collaboratively written by MIE Lecturers, Educators and members from the Mauritius Police Force as well as Officers from the Ministry of Land Transportand Light Rail. The RSE textbooks contain varied activities to engage pupils in practical exercises so that they learn Road Safety practices through lived experiences. The materials are fully contextualized and consist of numerous illustrations to be more appealing and to facilitate understanding.

Alongside the Pupil's Activity Book, we have also developed corresponding Teachers' Book to outline the pedagogical approaches that may be used to engage pupils during the RSE lessons. Educators have a critical role to play in the implementation of the curriculum to ensure that pupils develop the behavioural, social and cognitive skills necessary to become responsible road users. Educators are encouraged to involve their pupils in road safety campaigns, traffic weeks and other road safety sensitising projects.

We hope that the practical experiences provided in the textbooks will help to educate a new generation of careful and safe road users.

Dr Hemant BESSOONDYAL
Director
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Preface

ROAD SAFETY EDUCATION (RSE)

RSE is premised on the three roles of the young road user, namely, the child as a passenger, the child as a pedestrian and the child as a cyclist. It aims at developing the requisite knowledge, skills and attitudes for learners to become conscious and safe road users. By engaging learners in the road traffic system via practical activities, the Books develop an awareness of good practices and considerations for personal safety and the safety of other road users.

Effective RSE is founded on a pedagogical approach that makes learning interesting, relevant, authentic and enjoyable. It promotes deep learning and influences lifelong choices and behaviours. Navigating the road safely and effectively is an important skill that demands application in real life situations from a young age. It is thus imperative that learners understand and apply concepts related to safe practices on the road early on. A constructivist approach is thus privileged as it enables learners to be active participants in the construction of knowledge. The practical activities in the textbook provide pupils with opportunities to experience the traffic road system conventions and develop safe practices. The educator thus has a crucial role in helping learners make sense of the road traffic system. The RSE learning area empowers pupils to critically evaluate the challenges associated with the road system and take informed decisions and actions for their own well-being and the safety of others. The subject teaches them how to avoid injury and reduce accidents.

Note to Educators

The teaching and learning resources in the Teache's Book provide a guide to educators for the implementation of the RSE curriculum and are not meant to be prescriptive. The educator can adapt the activities to suit the needs of his/her class and s/he may develop supplementary activities as necessary. As a role model for pupils, the educator should demonstrate genuine interest in the subject and be proficient in road safety concepts, rules and regulation. Above all, s/he must enable pupils to derive essential insights into RSE through careful preparation of the lessons.

Both formative and summative evaluation are an integral part of teaching and may be conducted through a variety of tools, such as worksheets to test behavioural, social, and cognitive skills. The outcomes of the syllabus will be determined through pupils' demonstration of positive behaviours, good judgment and decision-making skills, and socially responsible attitudes as road users.

Table of Contents

LESSON 1 & 2 | Rules and regulations for cycling

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Explain the importance of having rules and regulations for cycling.
- State the rules and regulations pertaining to cycling in Mauritius.

Material(s)/Equipment: Excerpt from the Road Traffic (Cycle) Regulations 1966 – Teacher made poster

Venue: Indoors

Duration: (2 x 25 minutes)

Teacher's Note

Rules and regulations are part of our daily life. In Mauritius, same as in the case of other motor vehicles, rules and regulations for bicycles are governed by the Road Traffic (Cycle) Regulations (1966). It is good that pupils at this age get acquainted with the common rules and regulations for bicycles as this mode of transportation is common amongst children. Getting them to know about the law shows the importance as well as how serious cycling is.

Through this lesson, you will help the pupils get to know the common laws governing cycling in Mauritius as well as the common rules and regulations that they should abide by when riding a bicycle.

Road Traffic (Cycle) Regulations (1966) make provision for the use of bicycles as follows:

2. Registration of bicycle

No person shall use a cycle on any road, unless such cycle is registered. *(Registration of a cycle can be done at the nearest Police Station)*

Electric cycles having an electric motor power output of 250 watts or less are also registered as electric cycle at Police Stations.

10. Registration plate

The registration plate issued *(under regulation 3 of these Regulations)* shall be permanently affixed to the cycle so that the numbers thereon shall be easily distinguishable at all times.

11. Provision of horn or bell

Every cycle shall be fitted with a horn or bell affixed thereto and which shall at all times be in good working order: Provided that no such horn shall be used unnecessarily or so as to cause annoyance to any person.

12. Provision of brakes

No person shall use a cycle on any road unless such cycle be fitted with two independent brakes in good working order.

13. Provision of lamps and reflectors

No person shall use a cycle on any road between sunset and sunrise unless there shall be attached to such cycle-

(i). a lamp so constructed as to throw a white light visible from a reasonable distance in the direction in which the cycle is proceeding; and shall be lighted and kept alight so as to show the movement and position of the cycle; and

(ii). a red light or a red reflex reflector clearly visible from the rear of the cycle.

14. Keep at least one hand on the handlebar

Any person riding a cycle on a road shall keep at least one hand on the handlebar.

15. Towing or attending another bicycle

No person riding a cycle on a road shall tow another cycle or in any way attend to another cycle while riding a cycle.

16. Riding side by side to any other vehicle.

No person riding a cycle on a road shall ride abreast other vehicles.

17. Obey Road traffic sign (one-way sign)

No person shall ride a cycle on any road signposted for one way traffic in a direction other than that signposted.

18. Police control

Any person riding a cycle on a road shall stop if requested to do so by a Police Officer in uniform.

19. Pushing/Riding a bicycle on a footway

No person shall ride or push a cycle on any footway.

20. Direction cues to other road users

Any person riding a cycle shall, when about to overtake, turn to the right or left or to stop, signal that he is going to do so in the following manner:

If about to overtake or turn to the right. Extend arm horizontally to the right.

If about to turn to the left. Extend arm horizontally to the right and then raise it.

If about to stop. Extend arm horizontally to the right and then drop it.

21. Keep the bicycle as near the left edge of the road

Any person riding a cycle shall keep the cycle as near the left edge of the road as is compatible with the nature of the road.

22. Overtaking traffic

Any person riding a cycle shall, when overtaking any traffic keep on the right or offside of such traffic.

23. Coming out from a minor road

Any person riding a cycle shall when coming out of a less important road, including any private road or any place, on to a more important road or on to a main road approach such more important road or such main road slowly and give way to traffic travelling on such more important road or on such main road, stopping if necessary to enable such traffic to pass.

24. Riding the bicycle under the influence of illicit substances

No person shall ride or attempt to ride a cycle on a road if he is under the influence of drink or a drug.

25. Leaving the bicycle unattended

No person shall –

1. Leave a cycle unattended on any road so as to cause an obstruction;
2. Park a cycle against the kerb in such a way as to obstruct the free access to the footway;
3. Park his bicycle at a bus stand in such a way as to obstruct the free movement of passengers at such bus stand.

26. Carrying any baggage on the bicycle

No person shall carry any baggage on a cycle except –

1. A can under a frame, secured to it, provided such can does not protrude by more than 6 inches on either side of the frame;
2. Baggage properly secured and carried in such a manner as it is not likely to cause any danger to the person in charge of the cycle or to other users of the road.

27. Carrying another person on the bicycle

(1) It shall not be lawful for more than one person to be carried on any road on a cycle unless it is constructed or adapted for the carriage of more than one person.

(2) If a person is carried on a cycle in contravention of the provisions of the last preceding paragraph, each of the persons so carried shall be guilty of an offence.

Procedure:

Initiate a class discussion on the different rules that the motorists need to follow in Mauritius.

You may use the following questions as prompts:

1. Is it obligatory to wear a seat belt when driving a car?
2. Do you think that bicycles have rules and regulations? If yes, what are they?
3. Can you tell one rule to follow when riding a bicycle?

Brainstorm the different rules and regulations that cyclists must follow in Mauritius. Note the answers provided by the pupils on the whiteboard. Feel free to add to and justify their answers.

Introduce the rules and regulations governing cyclists in Mauritius. Adapt the language as per the level of your class. Refer to the excerpt in the Teacher's Note.

You may use the following pictures as reference to introduce some laws:

ACTIVITY 1: Observation & Discussion

Riding a bicycle can be easy but you should be aware that there are some rules and regulations to consider while cycling. These ensure the safety of road users, including cyclists, and prevent accidents.

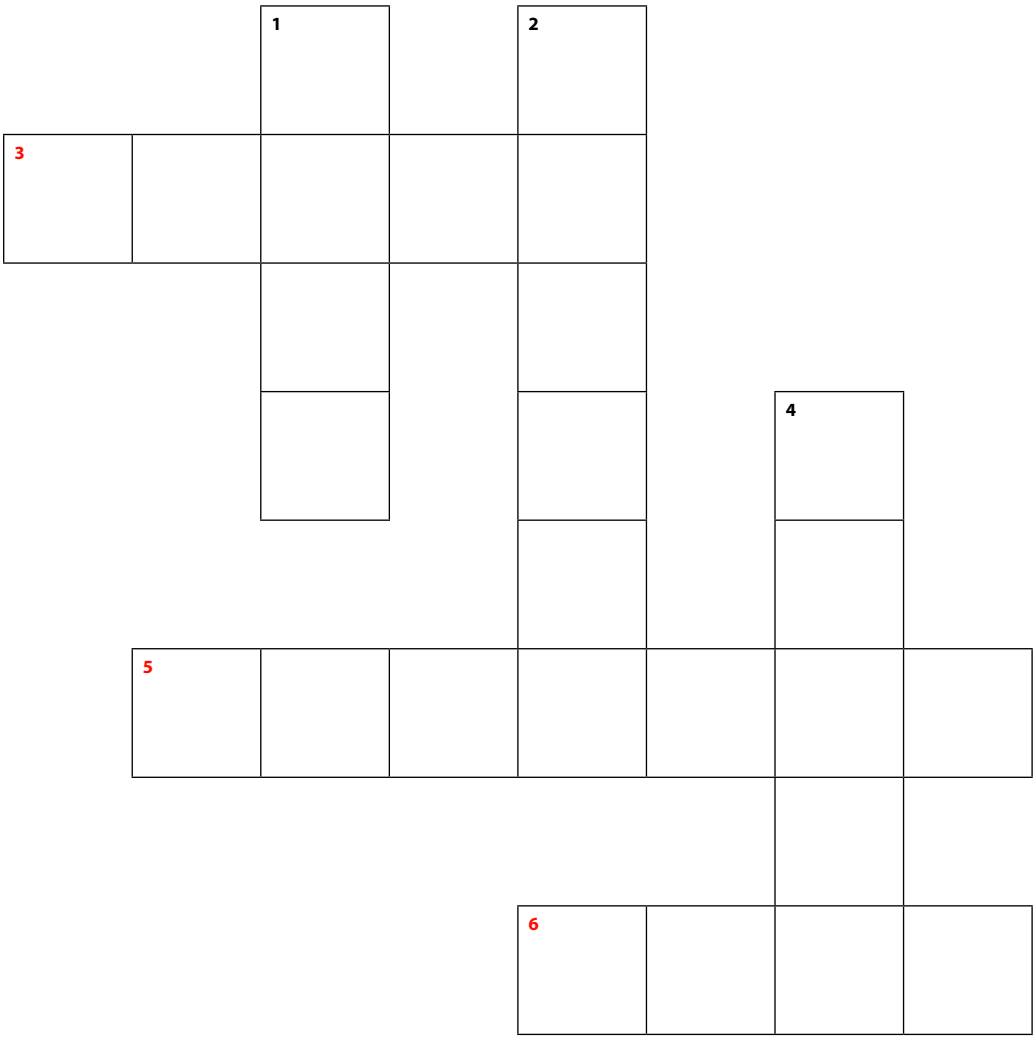
1. Front lamp

2. Rear brake system

3. Rear red reflex reflector

4. Bell or horn

Complete the crossword below.



Horizontal

3. Your bicycle should be equipped with it so that you can stop.
5. You should not push you bicycle on _____ .
6. You should always _____ traffic signs.

Vertical

1. This is important for you if you have to ride a bicycle at night.
2. You should always wear it to protect your head when riding a bicycle.
4. You should register your bicycle at the nearest police station to have one.

List of words: Helmet, Brake, Obey, Plate, Footway, Lamp

Use the poster on Road traffic Regulation(cycle) to explain. Tell the pupils that it is the responsibility of the cyclist and other road users to respect these regulations.

- Proceed with the safety rules to be observed when using a bicycle.
- Tell the pupils that 'safety and prevention' are key words to always keep in mind when using the road. Along with the common regulation enforced for the cyclists, there are also some safety guidelines that promote bicycle safety.

Lay emphasis on the safety precautions to be taken when riding a bicycle, that is:
Initiate a discussion around the safety rules to be adopted when riding a bicycle. Some examples are:

- Always perform bicycle checks before riding *(ABC checks - air pressure check, brake check, chain and crank review)*
- Always wear safety/protective gears *(Helmet, elbow and knee pads)*

Emphasise that the rules and regulations ensure the safety of road users, including cyclists, and prevent accidents. These rules and regulations should be always observed.

CLASS ACTIVITY 2

Let's create a 'Rules and Regulations' poster!

1. For this activity you may use Bristol paper and A3 paper.
2. Place the pupils in groups of 5 or place them in groups according to your roll.
3. Ask them to brainstorm with friends on important elements to place in the poster.
4. Ask them to bring pictures that they can glue, or they can draw and add colours of their choice to render the poster more meaningful.
5. When done, ask each group to present their poster to the class.

Evaluation:

Ask pupils to complete Activity 3 in the Pupil's Book.

LESSON 3 | Advantages of using a bicycle

Learning outcome(s): By the end of the lesson, pupils should be able to:

- List the advantages of using the bicycle.
- State the benefits of bicycle riding.

Material(s)/Equipment:
Venue: Indoors
Duration: 25 minutes

Teacher's Note

Apart from being a great physical activity, bicycle riding is also beneficial for working out your brain and boost self-confidence. It helps improve gross motor skills by working on coordination, endurance, and muscle strength. Bicycle riding also helps with full body sensory awareness along with visual stimulation. It also helps children be more focused and alert.

Furthermore, bicycles are eco-friendly, with a zero-carbon emission rating, and have a low-cost maintenance.

Procedure:
Initiate a class discussion around the use of bicycles both locally and globally.

You may use the following questions as prompts:

1. Do you like to ride bicycles?
2. Do you have a bicycle?
3. If you will buy one, what do you look for when choosing a bicycle?
4. Can you name some benefits of owning and riding bicycles?

– Ask the class to mime the feet movement when riding a bicycle.
Gear discussion by mentioning the health benefits of riding a bicycle.
Lay emphasis on how cycling helps to develop their gross motor skills, physical endurance whilst working out on body coordination and muscle strength.

In groups ask pupils to come up with benefits of owning a bicycle.

- Fetching groceries
- Exercise – keep oneself healthy
- saves fuel
- Autonomy

Let the pupils acknowledge that bicycles are an eco-friendly mode of transport and have a low-cost maintenance. These can be great incentives to prioritise the use of bicycles for short distances instead of taking motor vehicles.

Teacher's Note

Some advantages of bicycles are as follows:

1. **Low cost:**
   Bicycles are relatively inexpensive to purchase compared to other vehicles. This makes them a cost-effective option, especially for individuals or families on a tight budget.

2. **Reduced fuel and operating costs:**
   Bicycles run on human power, eliminating the need for fuel or electricity. This significantly reduces the overall transportation expenses for individuals or households.

3. **Lower maintenance costs:**
   Maintenance tasks such as cleaning, lubricating the chain, and periodically checking tyre pressure are relatively inexpensive and can often be done by the cyclists themselves. Major repairs are less frequent and typically more affordable than those required for motorised vehicles.

4. **Long-term durability:**
   Bicycles, when properly maintained, can have a long lifespan. Since they do not have complex engines, transmissions, and other mechanical components that may require costly repairs or replacements, bicycles are very durable. This longevity allows cyclists to enjoy the economic benefits of cycling over an extended period.

5. **Health benefits:**
   Regular cycling can improve cardiovascular health, reduce the risk of chronic diseases, and contribute to overall fitness and well-being. By promoting a healthier lifestyle, bicycles can help individuals save on medical expenses and increase their productivity and earning potential.

6. **Cost-efficient commuting:**
   Bicycles are particularly advantageous for short to moderate commuting distances. They provide a cost-efficient alternative to motorised transport for daily commuting needs, especially in urban areas with congested traffic and limited parking options. Cyclists can save money by avoiding public transportation fees, parking expenses, and the depreciation costs associated with owning a motor vehicle.

7. **Environmental sustainability:**
   Bicycles are environmentally friendly and contribute to sustainable transportation. They produce zero emissions, reduce air, and noise pollution, and help combat climate change.

ACTIVITY 1: Ask pupils to observe and discuss the following infographic:

Ask pupils about their experience of riding a bicycle. You may trigger more interaction by bringing some anecdotes from your side, so that you can guide the discussion.

After the discussion, as a summative evaluation, carry out the class activity 'Let's take a bicycle' infographic.

Evaluation:

Ask pupils to complete Activity 2 in the Pupil's Book.

LESSON 4 | Riding the bicycle at night

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Describe how to ride a bicycle at night.

Material(s)/Equipment: Pupil's Activity Book
Venue: Indoors
Duration: 25 minutes

Teacher's Note

Night and dark places have often proved to be very risky and dangerous for cycling. Therefore, pupils should be able to know the risks and hazards of cycling at night, and how to mitigate risk.

They should be acquainted with the different equipment which can be used so that they can be seen at night; for example, using a retro-reflective vest, wearing white or light-coloured clothes, have front and rear lamps in the bicycle, reflectors on pedal, and spoke reflectors.

Procedure:
Initiate a class discussion around riding a bicycle at night.

Ask the pupils to observe and discuss the pictures below:

Picture A

Picture B

You may use the following questions as prompts:

1. What is the difference between Picture A and Picture B?
2. What stands out in Picture B?
3. Why can you not distinguish the man in Picture A?
4. Have you ever ridden a bicycle at night?
5. What precautions should you take before riding a bicycle at night?

Highlight that the man in Picture A is not visible as he is wearing a dark-coloured jacket at night and therefore cannot be seen by other motorists. Elaborate on the consequences of such actions when riding a bicycle at night.

Proceed with a discussion on safety precautions to be taken when riding a bicycle at night. Tell the pupils to avoid riding a bicycle at night as far as possible because of risks that such activity comprises.

Emphasise that since there are low light and low visibility conditions, it is fundamental that the bicycle is equipped with an appropriate white lamp, white reflector in front, a red light and red reflex reflector at the rear to ensure that the cyclist is seen by other road users.

It is good to know that bicycle headlamps should emit a steady white (or nearly white) light because this indicates the direction that the bicycle is traveling.

Picture C

Picture D

As per the Road traffic (cycle) Act 1966:

13. Provision of lamps and reflectors

No person shall use a cycle on any road between sunset and sunrise unless there shall be attached to such cycle-

(i) a lamp so constructed as to throw a white light visible from a reasonable distance in the direction in which the cycle is proceeding; and shall be lighted and kept alight so as to show the movement and position of the cycle; and

(ii) a red light or a red reflex reflector clearly visible from the rear of the cycle.

A red rear lamp or reflector makes a bicycle visible to traffic at the back. It is important to make this reflector or lamp large enough and bright enough to be seen by motorists at enough distance to slow or stop in time when travelling at high speeds. Pedal reflectors can be also useful as they mimic the movement of the cyclist. Reflectors fitted on the spokes allow the cyclist to be seen by motorists coming from side roads.

It is also recommended that the cyclists wear white or light-coloured clothes along with a retro-reflective vest and safety gear to ensure maximum protection and ensure that they are visible to other motorists on the road.

Picture D

Picture E

Picture E and Picture F show the difference between a bicycle having no lamp and one which has both a lamp and a helmet lamp. Use the two pictures to show to the pupils the importance of having such lamps when riding at night.

Evaluation:

Ask pupils to complete Activity 1(1.1,1.2,1.3) in the Pupil's Book.

LESSON 5 | Directional cues from motorists

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Recognise directional cues from motorists when riding a bicycle.

Material(s)/Equipment: Teacher -made Picture Cards of common directional cues / Pupil's Activity Book

Venue: Indoors

Duration: 25 minutes

Teacher's Note

Cycling on roads requires a harmonious relationship between cyclists and motorists to ensure safety and an efficient traffic flow. As a cyclist, understanding and responding to directional cues from motorists is crucial for maintaining a smooth interaction on the road.

Directional cues from motorists, such as turn signals and vehicle positioning, provide valuable information about their intentions, and help cyclists anticipate their next moves. By being aware of these cues and responding accordingly, cyclists can enhance their safety and cooperation with motorised traffic.

Procedure:

Engage in a discussion with the class about how motorists interact among themselves. For instance, how does a driver know that another driver is turning left or right? Explain to the pupils that these are directional cues, and that they are important to every road user as well as being a form of courtesy.

Explain the importance of understanding and responding to directional cues from motorists as a cyclist.

Ask participants about their familiarity with common directional cues from motorists. Emphasize the significance of these cues in ensuring safe interactions between motorists and cyclists. Write down their responses on the board.

ACTIVITY 1: Recap and discuss common directional cues such as turn signals, hand gestures, and eye contact.

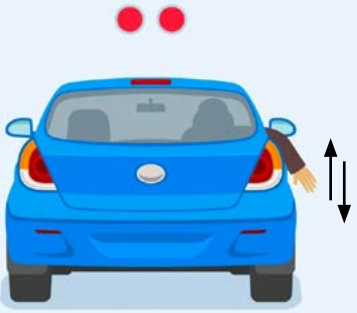
Proceed to – refer to Pupil's Activity Book and have a class discussion. Help pupils fill in the directional cues of each picture.

1. Car right turn signal.

2. Car left turn signal.

3. Car driver's hand gesture for right turn.

4. Car driver's hand gesture for left turn



5. Car driver hand gesture stop.

6. Car stop lights.

Describe each cue, its meaning, and how it should be interpreted by cyclists. For example, if the car has its left turn signal blinking, the cyclist must be careful and slow down.

ACTIVITY 2: Read the following scenarios involving cyclists and directional cues from motorists.

Write down your response or action for each scenario. *(Know where and what you should do as a cyclist)*

1. You are riding your bicycle on a road. As you approach an intersection, you notice a car ahead of you signalling a right turn. What should you do?

   _____

   _____

   Suggested answer: *Reduce your speed and be prepared to stop.*

2. You are cycling on a road when a car turns on its hazard lights. How should you react?

   _____

   _____

   Suggested answer: *Pay attention and be prepared for potential obstacles or dangers on the road. Slow down, be alert, and proceed with caution.*

Summarize the key points discussed during the lesson.
Emphasize the importance of ongoing vigilance and communication between motorists and cyclists on the road.

Evaluation:
Ask pupils to complete Activity 2 in the Pupil's Book.

ACTIVITY 3: Carry out the class activity "Analyse the scenarios!" and "In which direction are you going?"

LESSON 6 & 7 | Using the roundabout

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Explain how to use the roundabout as a cyclist.

Material(s)/Equipment: Pupil's Activity Book.
Venue: Indoors
Duration: 2 x 25 minutes

Teacher's Note

Roundabouts are circular intersections intended to improve traffic flow and are designed to reduce speed. Since cyclists are vulnerable road users, it is essential to get to know the rules and best practices to ensure a smooth and secure ride.

Vehicles using the roundabout move in a clockwise direction around a central island. Vehicles can turn left or right, go straight ahead, or make a full turn (U-turn) while going around the central island. When you approach a roundabout, you must slow down or stop to give way to all vehicles already in the roundabout.

This means giving way to vehicles already in the roundabout on your right, and vehicles that have entered the roundabout from your left or from directly opposite you.

Start with a whole class discussion about roundabouts. Ask them if they have ever encountered roundabouts while cycling or driving and how they felt about them. This will help you gauge their prior knowledge about roundabouts.

Explain that roundabouts are circular intersections designed to improve traffic flow and reduce the risk of serious accidents.

Discuss the basic structure of a roundabout *(refer Act 1 in Pupil's Book)*. Explain the key components, such as entry points, circulating lanes, give way lines, give way sign, roundabout sign, direction of flow, and exit points.

Highlight that cyclists should follow the same traffic rules as drivers when using roundabouts. They should enter and navigate the roundabout in a predictable manner.

Remind them that vehicles coming from the right at the roundabout have priority over them. Brainstorm the different ways they think they should approach a roundabout as a cyclist.

Explain the specific rules and best practices for cyclists using roundabouts:

Positioning:
Cyclists should approach the roundabout from the appropriate lane.

Yielding:
Cyclists must yield to vehicles already in the roundabout. They should wait for a safe gap in the traffic before entering.

Signalling:
Cyclists should use hand signals to indicate their intentions to drivers. Signal left when turning left or exiting and signal right when turning right.

Observing:
Cyclists should constantly scan the roundabout for other vehicles, pedestrians, and potential hazards. They should make eye contact with drivers whenever possible to ensure they are seen.

Speed and Control:
Cyclists should adjust their speed to match the flow of traffic in the roundabout. They should maintain control of their bike and avoid sudden movements.

- Lay emphasis on the importance of being seen by other motorists on the road.
- Summarize the key points discussed throughout the lesson, emphasising the importance of following rules and best practices when navigating roundabouts as a cyclist.
- Conclude the lesson by encouraging pupils to practise their roundabout navigation skills in during the practical session in a safe and controlled environment.

Evaluation:
Ask pupils to complete Activity 2 in the Pupil's Book.

LESSON 8 | Weather conditions and safe cycling

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Describe safe bicycle riding under different weather conditions.

Material(s)/Equipment: Picture cards
Venue: Indoors
Duration: 25 minutes

Teacher's Note

Cycling is highly dependent on the weather. Weather directly impacts the safety, comfort, and overall cycling experience of cyclists.

Understanding how weather conditions can influence cycling is crucial and allows cyclists to make informed decisions, prepare adequately, and adapt their riding style accordingly.

Each weather element can pose unique challenges and considerations for cyclists. From summer heat to wet and slippery roads, it is important to learn how to navigate these conditions safely and effectively.

Procedure:

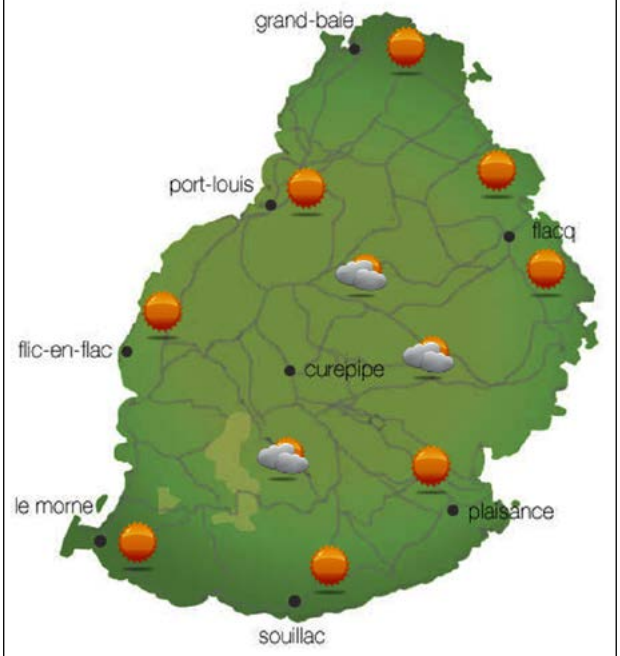
Engage the pupils in a discussion about cycling and ask them about their experiences of cycling in different weather conditions.

Introduce the topic of weather conditions and their impact on cycling. Explain that different weather conditions can affect a cyclist's safety, performance, and overall experience.

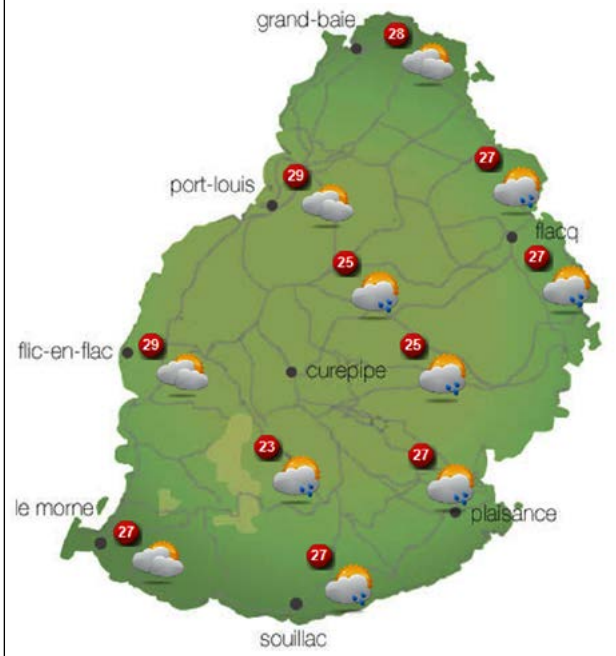
As a vocabulary activity, place pupils in groups *(maximum of 5 pupils per group)* and ask them to complete Activity 1 in their books.

Encourage them to use their prior knowledge and discuss their answers with their peers.
Go through the answers as a class, discussing the correct matches and addressing any questions or misconceptions.

Refer to Activity 1 in Pupil's Book – Weather forcast *(Picture A and Picture B)* on the board or the pupils can follow in their Activity Books.



Picture A



Picture B

Lead a discussion about the different weather conditions shown in the forecast *(e.g., sunny, rainy, windy, hot, cold)*.

Ask the pupils to identify the potential challenges and considerations a cyclist may face in each weather condition. Encourage them to think about safety precautions, equipment, clothing, and the overall impact on their cycling experience.

Facilitate a class discussion, allowing pupils to share their thoughts and ideas.
Discuss the importance of adapting and preparing for different weather conditions before cycling.

Brainstorm a list of strategies and preparations that cyclists can undertake to ensure a safe and enjoyable ride in different weather conditions. Write these strategies on the board.

Examples of strategies may include wearing appropriate clothing, adjusting tyre pressure, bringing extra water in hot weather, using lights and reflective gear in low visibility conditions, amongst others.

Refer to Activity 2 in the Pupil's Book.

ACTIVITY 2: Observation & Discussion

In a rainy weather, the cyclist needs specific equipment to ensure a safe ride. Here are some examples:

Tyres with proper treads
Tyres with proper treads provide you with the required adherence when cycling in rainy conditions.

Reflective gear
Wearing retro-reflective clothing or accessories increases visibility to motorists in rainy and low-light conditions.

Waterproof Jacket, pants or leg covers
Waterproof jacket, pants or leg covers help to keep the body dry and protect against splashes from the road.

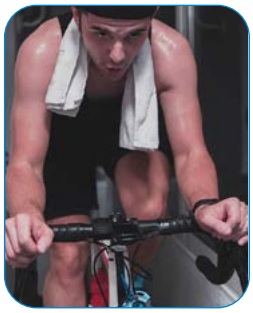
Fenders/mudguards
Fenders or mudguards are installed on the bicycle to prevent water and mud from splashing onto the cyclist and the components of the bicycle.

Lights
In rainy conditions with reduced visibility, it is important to have front light, rear light, front and rear reflectors on the bicycle to improve visibility for both the cyclist and other road users.

ACTIVITY 3: Observation & Discussion

Can you think of other gear that are useful to use when cycling in rainy conditions? On the other hand, in a hot weather, the cyclist needs this equipment to ensure a safe ride. Here are some examples:

Lightweight and breathable clothing
Choose light coloured, lightweight, and breathable clothes and socks that allow airflow and help evaporate sweat.



Cooling towel
Carry a cooling towel that can be soaked in water and draped around your neck to help lower your body temperature.

Extra water and snacks
Carry extra water and lightweight snacks, such as energy bars or fruits, to stay hydrated and maintain energy levels.

Ventilated helmet
Use a well-ventilated helmet that allows air circulation and helps to keep your head cool.

Time of day *(ride during cooler times of the day)*
Plan your rides during cooler times of the day, such as early mornings or evenings, to avoid the peak heat hours.

Summarise the key points discussed throughout the lesson, emphasising the impact of weather conditions on cycling and the importance of adaptation and preparation.

Allow time for pupils to ask questions or share any additional thoughts or experiences related to cycling and weather conditions.

Conclude the lesson by encouraging pupils to stay informed about weather forecasts and to be prepared for any weather conditions they may encounter while cycling.

Evaluation:
Ask pupils to complete Activity 4 in the Pupil's Book.

LESSON 9 & 10 | Importance of The Light Rail Vehicle

Learning outcome(s): By the end of the lesson, pupils should be able to:

- State the importance of the light rail vehicle.

Material(s)/Equipment: Pupil's Activity Book, Laptop and overhead projector.
Venue: Indoors
Duration: 2 x 25 minutes

Good to know

1. The following information has been retrieved from the website of the Metro Express Ltd, https://mauritiusmetroexpress.mu/ .

2. "The Metro Express Ltd (MEL) is the company responsible for the implementation of a multimodal transport system by pioneering a new sector in the local transport industry through the development, financing, construction, operation and management of the Metro Express Light Rail Transit (LRT) System in Mauritius under the Metro Express Project.

3. The mission of the MEL is to collaboratively develop and operate an economically and environmentally sustainable light rail network that is inclusive, comfortable, safe, secure, reliable, and accessible to all members of society."

4. Moreover, the aim of the network is to reduce congestion in different areas and especially during peak times. The Light Rail Vehicle is powered solely by electricity making it an environmentally friendly vehicle.

5. In December 2019, the first Light Rail Vehicle (LRV) began its official journey in Mauritius. The LRV can hold more than 300 passengers and has different lines.

6. Even if the LRV is originally white in colour, most LRVs are wrapped in advertising which makes the vehicles look different from each other.

7. Its speed varies from 10 km/h near junctions to 70 km/h in non-residential areas.

8. This lesson aims at introducing the LRV and to discuss its importance.

Procedure:

1 Brainstorm with the pupils about light rail vehicles. You may use the following questions:
- Have you ever seen a light rail vehicle? If yes, where?
- How does the light rail vehicle look like?
- How fast does the light rail vehicle go?

2 Refer to the Pupil's Activity Book picture card of a light rail vehicle.

3 Ask the pupils to describe what they see in the picture. You may use the following question:
- What is the colour of the light rail vehicle?
- What do you see around the vehicle?

4 Play the video "Metro Express, toujours à l'heure" available on the Metro Express Mauritius YouTube channel: https://www.youtube.com/watch?v=dvGAaWEh5lQ.
It gives a brief of what ithe LRV is. Ask pupils what they have seen in it.

5 Inform pupils that the LRVs are usually wrapped in advertising and may be of different colours. The original colour is white as shown in the above picture.

6 Discuss with the pupils the importance of light rail vehicle in Mauritius. Explain that:
- The main purpose of the LRVs is to reduce congestion in and for mass transportation of passengers out of certain regions.
- It aims at encouraging the public to use the LRV instead of their cars. It is more rapid and has priority over all vehicles. It has its own route which no other vehicle can use. It only slows down at junctions as a safety precautions.
- The LRV is always on time. It has a specific arrival time and a specific departure time. Its arrival time is always displayed on the platform.

7 Remind pupils that there are rules, guidelines and traffic signs specific to the LRVs which will be discussed in other lessons.

Evaluation:

Ask pupils to complete Activity 2 in the Pupil's Book.

LESSON 11 | The Light Rail Vehicle (LRV)

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Name important features of the light rail vehicle

Material(s)/Equipment: Picture cards of different features of the light rail vehicle
Venue: Indoors
Duration: 25 minutes

Teacher's Note

1. This lesson is mainly for those who uses the LRV to commute to schools or other places as well as to introduce those who intend to use the LRV.
2. The Light Rail Vehicle is very different from any other vehicle. Most of its features are automated. Most of the time opening of the doors are operated by the LRV captain.
3. Compared to other means of transport, the LRV has minimum number of seats available. In LRVs, passengers usually stand.
4. This lesson will be focussed on basic features of the LRV.

Procedure:

1. Recap with the pupils about the importance of the Light Rail Vehicle.
2. Explain to the pupils that this lesson will focus mainly on some important features of the LRV which they should know when travelling by the LRV.
3. Ask pupils whether they have been able to travel by the LRV.

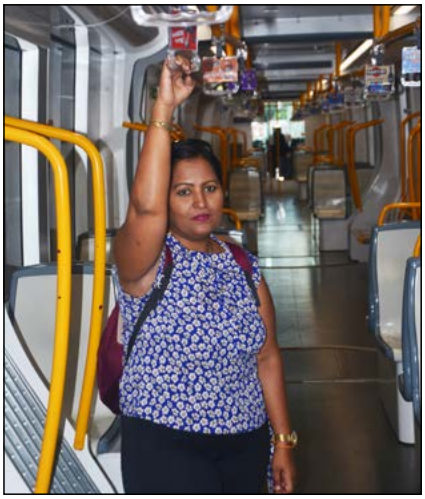
Refer to Activity 1 in Pupil's Activity book to discuss and label different features of the LVR.

ACTIVITY 1: Ask the pupils what they can see in the picture. Focus will be on the yellow handrails, handlebars, seats, doors, space for handicapped person, emergency buttons, route map and passenger information display.

Explain the different features to the pupils.

1. The yellow handrails and handlebars:

Yellow handrails and handlebars are available in the LRV for the passengers to hold on to. This will protect them from falling. These bars and rails are placed at different height so that any person of any height can have access to them. Those who are tall can use the one from the roof of the LRV and those who are shorter can use the one which is more appropriate for them.



2. The seats:

There are two types of seats, the white seat and the yellow seat. The white seat can be used by any passenger, while the yellow seat is reserved for the elderly, pregnant women or any other person who has a disability and needs to sit.

3. The doors:

Opening and closing of the doors are usually controlled by the LRV captain. However, there is a button on the door which can be pressed to open the door when it has stopped. There is a specific door that should be used by people using wheelchairs. There is a wheelchair sign on the door.

4. Space for wheelchairs:

On the LRV, there is a dedicated space for wheelchair. When a person using a wheelchair wants to board the LRV, he/she should press the blue button on the door. The door will stay open until the wheelchair user arrives at the wheelchair space.

When the wheelchair user wants to alight the LRV, he/she should press the big blue & black button at the wheelchair space. When doing so, the door will open automatically at the next stop and will only close when the wheelchair user gets off the LRV.

The train captain, with the help of camera available on the side of the doors and near the wheelchair space, will ensure that the disabled person has settled down or left the train before closing the door and starting to move

5. Emergency button

There are two types of emergency buttons: Emergency egress device and the intercom button. In case a person is not feeling well, he may use the intercom button and talk to the LRV captain who will then act accordingly.

However, the emergency egress device is used only in extreme emergency situations.

Emergency egress device:

When pulling this level, the LRV will override the Train Captain and will decrease its speed to 0 km/hr by applying maximum brake. When LRV speed reaches 4km/hr, the door will start to open. This level is pull ed only in extreme emergency.

Intercom Button:

By pressing this button, the person will talk to the Train Captain or the Operation Control Centre.

6. Route Map:

A route map is available in the LRV. A person can refer to the map to know the distance to his destination and the number of stops that the LRV will have. It also indicates where the stops coincide with bus terminals.

7. Passenger Information Display:

There is an overhead display. It usually indicates the next stop. It also shows on which side the door will open. An arrow on the left shows that the door will open on the left, while an arrow on the right shows that the door will open on the right.

Evaluation:

Help pupils to label the different features of the LRV.

LESSON 12 & 13 | The Platform

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Name important features of the platform.

Material(s)/Equipment: Pupil's Activity Book
Venue: Indoors
Duration: 25 minutes

Teacher's Note

1. The LRV platform is an important feature of the railway network. It is the equivalent to the bus stops.

2. The platform operates the same as a bus-stop except for the ticket machine. While in a bus, there is a receiver to give the ticket, to travel by the LRV, the ticket needs to be bought at the ticket machine and scanned accordingly (tapped-in) through the Ticket Card reader machine before getting on the LRV.

3. There are also different markings on the platform, such as the yellow lines/tiles, yellow tactile paving, wheelchair signs to help LRV users.

4. Pupils should be aware that they need to behave properly when they are on the platform waiting for the LRV.

Procedure:

1. Brief recap previous lesson on LRV.
2. Ask pupils where they can catch a LRV. Guide them to understand that they can get a LRV "at a platform" or what we commonly say "Metro Station".

3. Explain to pupils that this lesson will focus mainly on some important features of a platform.

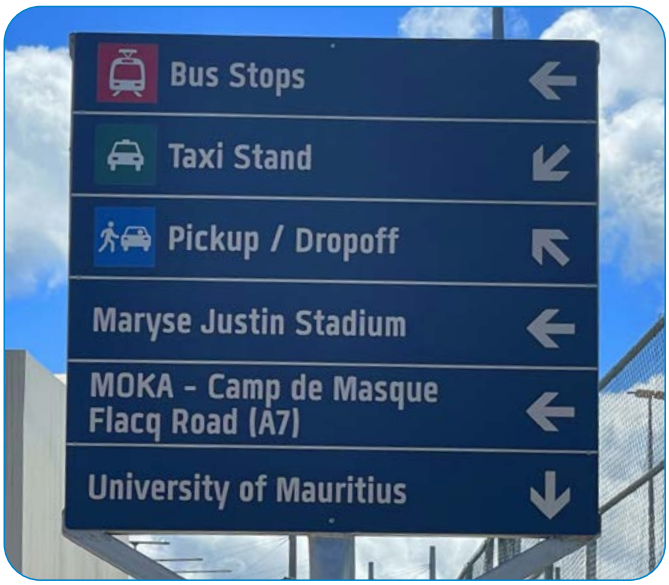
ACTIVITY 1: Refer to Pupil's Activity Book lesson 9 to observe, discuss, explain and label different features of a platform. Teacher to help pupil to fill in the 'purpose' section.

4. Show pupils the picture below.

5. Ask the pupils what they can observe in the picture. Focus will be on the different features that the platform has such as: name of the station, wayfinding signage at the light rail station, the yellow lines/tiles, yellow tactile paving, the handicapped marking, the passenger information display, the ticket machine and the pedestrian crossing.

6. Explain the different features to the pupils.
   - **The name of the station:**
     On each platform, the name of the station is indicated. This helps the user to know where he/she is.

- **Wayfinding signage at the light rail station:**
  The platform usually has two different sides. On each side, it indicates where the LRV is going. It is therefore important for the user to know which side of the platform he/she needs to stand on so that he/she catches the correct LRV.



There are also different information signs on the platform which helps you to find your way around:

1. The final destination sign of the LRV.
   This indicates where the LRV is going. It helps the user know where he/she should stand while waiting for the LRV.
2. The amenities around the platform
   This usually shows bus stops, taxi stands and other important places around the platform.

- **The yellow lines/tiles:**

  There are yellow lines/tiles at the end of the platform. Users of the LRV are requested to stand behind the yellow lines/tiles at all times, even if there is no LRV around. This is to ensure that there is no risk of falling off the platform. Once the LRV has reached the platform and doors are opened, users may then cross the yellow lines/tiles to step into the LRV.

- **Yellow tactile paving:**

  In order to help blind or visually impaired people find their way safely around the platform, there is provision for yellow tactile paving. Tactile paving consists of a pattern of raised surfaces such as tactile studs and strips. The blind textured pavements are given different patterns at the points where direction changes. Being linear on the straight and round at intersections, these markers let the intended users sense through feet where they should walk to.

- **Wheelchair marking:**
  On the platform, there is a wheelchair marking sign. This indicates the place where the person using a wheelchair should wait for the LRV. The door of the LRV for the wheelchair opens at that specific place. People using a wheelchair should use that specific door as there is a designated space in the LRV for the wheelchair.

- **The Passenger Information Display:**
  There is an overhead indicator bar on each platform. It indicates the estimated time arrival of the LRV and its departure time. It also displays messages related to the safety of passenger. This is useful as it helps the user to know how long they should wait for the next LRV.

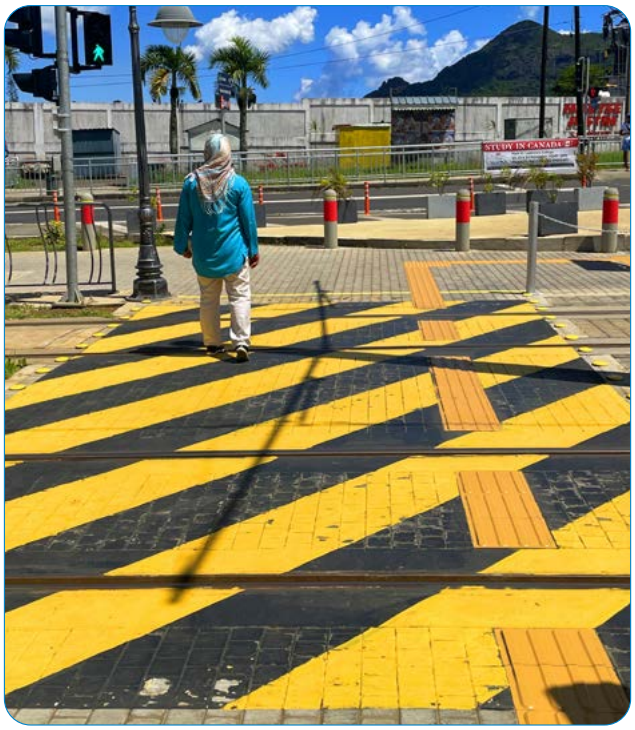
- **The ticket vending machine:**

Users should buy their tickets before boarding the LRV. While buying tickets, they can choose the platform where they will get off. These are called single-use tickets. If they need to board the LRV again, there will have to buy a new ticket.

Cards are also available for frequent users that they can top-up *(add money to)* on a platform via the ticket machine. Once they are on the platform, they can tap their card and board the LRV. Once they get off the LRV, they need to tap their card again so that the cost of their ticket is deducted from their card. It is to be noted that students and elderly persons have access to special cards

- **The Pedestrian level crossing:**

There are two types of Pedestrian level crossings that are usually found around each platform for pedestrian to cross the railway track: signalised pedestrian level crossing and non-signalised pedestrian level crossing. The signalised pedestrian level crossing always shows the Green Walking Man sign. However, when a LRV is approaching the platform, the light immediately turns to the Red Standing Man. This signals the pedestrians that the LRV is approaching.



Where available, it is important for the pedestrian to use the signalised pedestrian level crossing. However, if the signalised pedestrian level crossing is not available, the pedestrian can cross the railway track at the non-signalised pedestrian level crossing available. He/she should stay behind the yellow line and look both ways before crossing, ensuring that there is no LRV approaching or leaving the platform.

Evaluation:

Ask pupils to complete Activity 'Observation, Discussion & Labelling' in the Pupil's Book.

LESSON 14 & 15 | Regulations and light rail

Learning outcome(s): By the end of the lesson, pupils should be able to:

- State some regulations pertaining to light rail in Mauritius

Material(s)/Equipment:
Venue: Indoors
Duration: 2 x 25 minutes

Procedure:

1. Brainstorm with the pupils about rules and regulations that usually road users should abide by. Ask them what the purpose of regulations are and what can happen if a road user does not abide by them.

2. Explain to the pupils that if a road user does not abide by regulations set, they may either cause accidents or may have to pay fine if they are caught. Explain to them that they are either pedestrians or cyclists on the roads.

Teacher's Note

1. The introduction of the light rail vehicle has brought along new rules and regulations for all road users which can be found in "the Light Rail Act 2019".

2. In this lesson, some regulations pertaining to light rail in Mauritius will be introduced to create an awareness of and warn pupils how they should behave around light rail and light rail vehicle.

3. For this lesson, pupils will be regarded both as cyclists and pedestrians. As cyclists, they need to apply the same rules and regulations as any other vehicle.

4. Write the materialisation of the Light rail has introduced a new set of rules and regulations. Usually, a LRV follows its own route. Most of the time, it runs parallel with the roads. However, at some places, the LRV interacts with other vehicles. The place where the railway line crosses the road is called **level crossing**.

3. Below is a list of regulations that can be discussed with the pupils *(both as pedestrian and cyclist)*:
   - **Prohibition to drive, park, stop, or walk on or across railway line:**
     It is prohibited for any road user to drive, park or stop a vehicle, or walk on or across, a railway line unless it is at a level crossing.
     It is important to keep the light rail free from traffic and prevent any person from passing thereon.
   - **Right of way:**
     It is important for pedestrians and cyclists to understand that the LRV has priority over any pedestrian crossing or vehicles. As pedestrians and cyclists, they should stop and give way to the LRV.
   - **Traffic signals and warning signs at level crossings:**
     Traffic signals and warning signs should be respected at all times to prevent accidents.
   - **Illegal travelling:**
     Any LRV passenger should travel using a valid ticket or Metro Express (ME) Card. It should be shown to the ticket inspector when asked.
   - **Damage to light rail, light rail vehicle or light rail premises:**
     It is essential to respect the light rail, light rail vehicle or light rail premises at all times Users of the LRV should not cause damage to the vehicle or platform.

5. Explain to pupils that there are many regulations that regard the light rail, light rail vehicle or light rail premises. Only a few has been discussed here.

6. You may use the following videos to summarise your lesson. They are available on the Metro Express Mauritius YouTube channel:
   1. "Chapitre 1- Consignes à respecter" - *https://www.youtube.com/watch?v=6aVSf0zZw3s*
   2. "Chapitre 2- Consignes à respecter" - *https://www.youtube.com/watch?v=c7bN45iwlG4*

Evaluation:

Ask pupils to complete Activity 1 & Activity 2 in the Pupil's Book.

LESSON 16 & 17 | Traffic Signs *(light rail vehicle)*

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Identify selected light rail traffic signs.

Material(s)/Equipment: Pupil's Activity Book, Laptop and Projector.
Venue: Indoors
Duration: 2 x 25 minutes

Teacher's Note

1. The introduction of the light rail vehicle has brought along new traffic signs for all road users.

2. Pupils as pedestrians and cyclists should be aware that these traffic signs are to be respected at all times. Light rail vehicles have priority over any other road users. A pedestrian, a cyclist, a car or any other vehicle should give way to the light rail vehicle if it is approaching an intersection or a pedestrian crossing.

3. Some traffic signs in this lesson are governed by traffic laws. This means that in case of not respecting the traffic signs, the road user may be contravened.

4. However, for the safety of road users, the Metro Express Limited (MEL) has introduced some traffic signs which are not necessarily governed by traffic laws in Mauritius. The aim of these traffic signs is to create an awareness of dangers that road users may encounter around the light rail vehicle, light rail tracks and light rail platforms. In case of not respecting the traffic signs, the road user may not be contravened, but may put him/herself in great danger.

Procedure:

1. Explain to the pupils that with the light rail network, new traffic signs have been introduced. These traffic signs are applicable to the pupils if they want to ride their bicycles on the road.

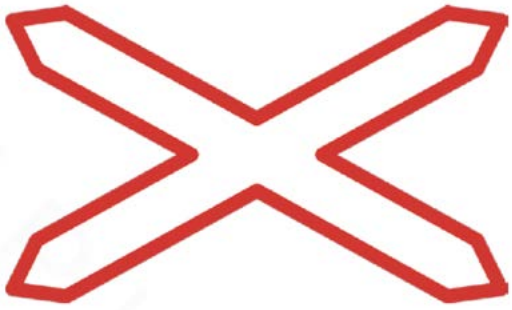
2. Remind pupils that since bicycle is a vehicle, they should abide by all traffic signs explained in the previous grades and lessons.

Refer to Pupil's Activity Book, Activity 1 to explain the following:

Traffic signs that are particular to the LR network are:

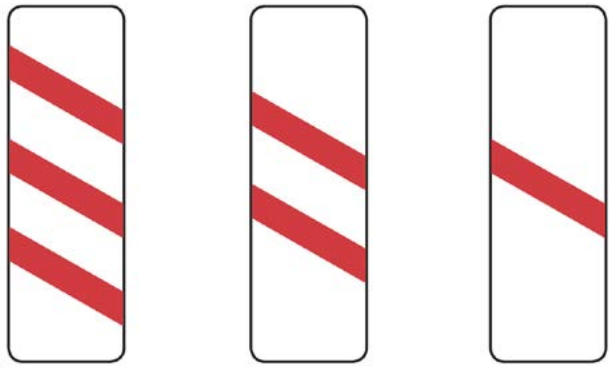
- **Level crossing without gate or barriers**
  This traffic sign warns road users that there are light rail vehicles crossing ahead. This is usually at junctions where there is a level crossing, that is, where the railway line crosses a road on the same level. It is only at this specific place that vehicles cross the railway tracks. At any other place, vehicles are not allowed to cross or run on the railway tracks.

- **Warning sign showing location of level crossing without gate or barriers**
  This indicates that there is no gate or barrier stopping vehicles when the LRV is at a level crossing. This sign is used when there is only one track.



If there are two or more tracks at the level crossings, the following traffic sign is displayed.

- **Countdown markers**
  To indicate how far the level crossing is from the road user, countdown markers are placed at specific distance.



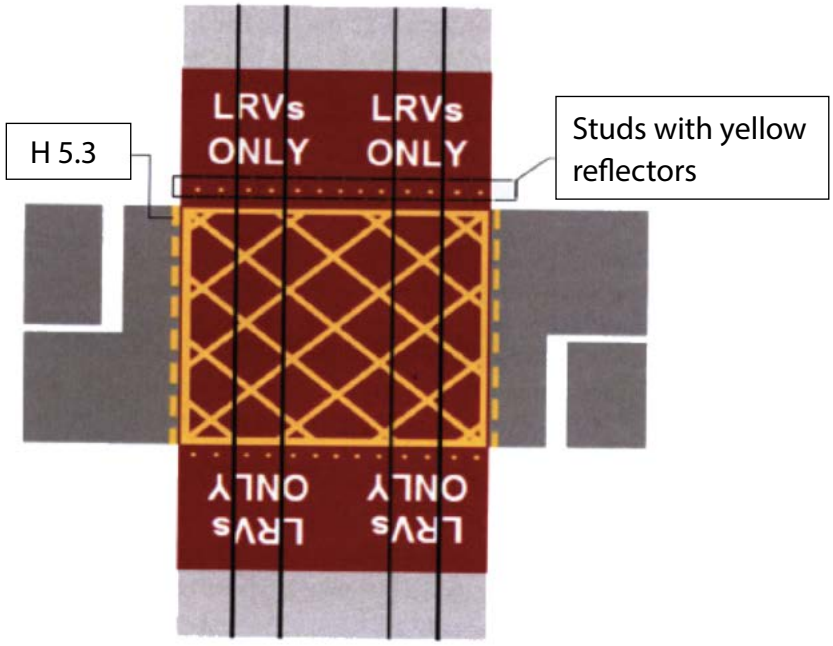
Each slash represents 80 metres. If we are approaching a level crossing, we might see the 3-slash countdown marker *(at 240 m from the level crossing)*, then the 2-slash countdown marker *(at 160 m from the level crossing)*, and finally the 1-slash countdown marker *(at 80 m from the level crossing)*.

- **Keep crossing clear**
  At all the times the level crossing must be kept clear.

- **Prohibition of road traffic on light rails.**
  These traffic signs are used to notify users that entry is prohibited for vehicles other than light rail vehicles. Cycles, motorcycles, cars, lorries, buses and other vehicles are not allowed to use these places. Pedestrians should also not cross there.

- **Transverse markings for delimitation of clear zone for road traffic at level crossings.**
  This road marking is always found at level crossing, where there is interaction between the LRV and other vehicles. Road users are not allowed to cross this when a light rail vehicle is crossing. Road users are also not allowed to park or wait on this area.

  You may use the following video "Chapitre 3 - Consignes à respecter" - *https://www.youtube.com/watch?v=uNVD0my0gXE* which is available on the Metro Express Mauritius YouTube channel.



- **Do not trespass on railway.**
  This sign is usually placed along railway lines. It is accompanied by a no entry for pedestrian sign.

No entry for pedestrians

- **Summarise the lesson by playing the following video for the pupils.**
  It is available on the Metro Express Mauritius YouTube channel: "*Usager de la route*" - *https://www.youtube.com/watch?v=pMj36X1prP8.*

Evaluation:

Ask pupils to complete Activity 2 in the Pupil's Book.

LESSON 18 | Travelling by the light rail vehicle *(LRV)*

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Identify the do's and don'ts when using light rail vehicle

Material(s)/Equipment: Laptop & overhead projector
Venue: Indoors
Duration: 25 minutes

Teacher's Note

1. This lesson will mainly warn the pupils about what they should do or shouldn't do when they are travelling using the LRV.

2. As there are many passengers in a LRV, it is important that pupils behave themselves properly around the platforms and in the LRV.

Procedure:

1. Recapitulate with the pupils the rules and regulations and the traffic signs in regard with the LRVs.

2. Play the video "Metro Express, facile, safe et confortable" available on the Metro Express Mauritius YouTube channel: *https://www.youtube.com/watch?v=IEKhmqK2zMI.* Ask pupils to watch the video attentively.

3. Put pupils in group of 4-5. Explain to them that they will have to discuss in their groups about what they should do and shouldn't do around the platforms and in the LRV. They may refer to the video they have just seen.

4. You may ask some groups to work on do's and don'ts on the platforms and other groups to work on the do's and don'ts In the LRV

5. Ask them to present their work to the whole class. Encourage each member of the group to participate in the presentation.

6. After the last presentation, use the following list to top-up any missing do's and don'ts on the platforms and in the LRV.

Around the platform	
Dos	**Don'ts**
Read and listen to instruction	Do not smoke on the platform
Always cross the rail at designated pedestrian level crossing found at both ends of the platform	Do not ride bicycle or motorcycle at pedestrian level crossing and platform.
Hold on handrail when using escalator and stairs	Do not attempt to cross the rail when a LRV is approaching.
Follow station rules and signages.	Do not run on the railway tracks or platforms.
To stay alert for any announcement or warning	Do not step in front of the LRV.
Wait behind the yellow lines or tiles.	Do not throw litter on the platform. Make use of bins.
Buy your ticket or have your ME card ready.	Do not push passengers.
Tap on your ME card or ticket before boarding the LRV.	Do not cause any damage to the platform premises.
Tap off your ME card or ticket before leaving the LRV.	
Be respectful and courteous.	

In the LRV	
Dos	**Don'ts**
Allow passengers to alight first before boarding the LRV.	Do not obstruct the LRV door to ensure free movement of commuters boarding and alighting the LRV
Always hold the yellow handrails.	Do not eat, drink or smoke in the LRV.
If no yellow seat is available, give your seat to Senior Citizens, pregnant ladies or people with disabilities.	Do not cause any damage to the LRV.
Be prepared in advance to exit the LRV at your destination.	Do not run in the LRV.
Always have your ticket or ME Card ready for inspection.	Do not lean against the doors.
Be respectful and courteous.	Do not play with the door buttons or intercom button or emergency egress device
Always check where the door will open.	
Always have your belongings with you.	
Leave the passageway clear if a person with a wheelchair is getting on or off the LRV.	
Listen attentively to all announcements in the LRV.	
Always be alert.	

Evaluation:

Ask pupils to complete Activities 1 & 2 in the Pupil's Book.

LESSON 19 | Safety issues when travelling in a light rail vehicle *(LRV)*

Learning outcome(s): **By the end of the lesson, pupils should be able to:**

- State the safety aspects when travelling in a Light Rail Vehicle

Material(s)/Equipment: Pupil's Activity Book, Picture cards of gangway, light rail vehicle platform, Pedestrian level crossing

Venue: Indoors

Duration: 25 minutes

Teacher's Note

1. It is important that pupils understand the safety issues associated with travelling in a light rail vehicle.

2. While using this mode of transportation, pupils need to ensure their personal safety before entering, while inside, and when leaving the light rail vehicle.

3. The user should be aware of one's personal safety while he/she
   - is waiting on the platform.
   - is crossing the rails.
   - is travelling in the light rail vehicle, whether sitting or standing.
   - is leaving the LRV.
   - finds himself/herself in emergency situations while travelling in LRV.

4. The user should also show good behaviour and attitude at all moments of their trip.

5. Pupils should be mindful that travelling by any means of transport entails risks and consequences. They should work to minimise risks that can cause accidents. They should always behave properly when using any means of transport.

Procedure:

1. Recapitulate with the pupils the do's and don'ts done in the previous lesson.

2. Ask pupils about the safety aspects that they should take into consideration when using the light rail vehicle: before entering, while inside and when leaving the light rail vehicle. You may use the following questions as prompt:
   - What are the risks when using the Light Rail Vehicle?
   - How should you behave in the Light Rail Vehicle?
   - What are the safety measures that should be taken when using the Light Rail Vehicle?

3. Let them discuss about potential risks involved when using the light rail vehicle. Write down their responses on the board.
4. Guide their responses to the following issues:
   - Safety while waiting on the platform.
   - Safety while crossing the rails.
   - Their personal belongings.
   - Behaviour and attitude during the trip.
   - Emergency situations.

5. Remind pupils that the light rail station is often crowded and there are usually some risks when using this mode of transport.

Teacher's Note

SAFETY ISSUES TO DISCUSS IN CLASS:

- **Platform safety:**
  The risk of falling onto the tracks, standing too close to the edge, or getting caught in closing doors.
- **Slips, trips, and falls:**
  The risk of falling due to sudden stops and obstacles inside the light rail vehicle.
- **Crossing the rails:**
  The risk of accident with the light rail vehicle if they cross the rail at any place.
- **Personal belongings:**
  The risk of theft or loss of personal belongings, such as wallets, phones, or bags.
- **Emergency situations:**
  In case of any emergency situations, the evacuation procedure will be carried out by MEL staff (Train Captain/Steward), and it is essential for commuters to pay close attention and adhere to the provided guidelines. The passengers may use the intercom button to talk to the Train Captain or the Operation Control Centre. In extreme cases, they can also use the emergency egress device.
- **Personal space and behaviour:**
  The importance of respecting personal space, not blocking exits, and avoiding disruptive
  or unsafe behaviour.
  Never run when inside LRV (metro)
  Never push to enter LRV.

Teacher's Note

SOME SAFETY MEASURES ARE:

- Stand behind the yellow line or designated safety area while waiting for the light rail vehicle.
- Be aware of your surroundings and stay alert.
- Wait for passengers to alight from the LRV before boarding.
- Hold onto the yellow handrails or grab bars while the vehicle is in motion.
- Keep personal belongings secure and within sight.
- Follow instructions and guidelines provided by the transit authorities.
- Be considerate of others and avoid obstructing doors or aisles.
- Avoid leaning against the gangway.
- Make use of Pedestrian level crossing when crossing rails.

6. Explain to pupils that the train captain usually sounds the bell before the LRV starts to run. If they hear the bell, they should not haste towards the LRV to avoid any mishap.

7. Remind pupils that they should always look both ways before crossing the railway tracks. Normally there are always two pedestrian level crossings at both ends of the platform. Pupils should make use of it. However, If there is no pedestrian level crossing, pupils should not cross the rail. They should make sure that the LRV has already left the platform before attempting to cross.

8. Encourage students to apply these safety practices when travelling in light rail vehicles.

Evaluation:

Ask pupils to complete Activities 3 and 4 in the Pupil's Book.

LESSON 20 & 21 | Speed deterrents

Learning outcome(s): By the end of the lesson, pupils should be able to:

- State the importance of speed deterrents.
- Identify different speed deterrents on the road.
- Understand the importance of speed control.
- Understand how road humps and speed cameras help prevent accidents and protect pedestrians.
- Recognize their responsibility as future road users to follow speed limits and respect speed deterrents.

Material(s)/Equipment: Pupil's Activity Book
Venue: Indoors / Outdoors
Duration: 50 minutes

Teacher's Note

Many fatal accidents are essentially caused by speed. At a higher speed, it is more difficult to react in time and prevent an accident. Speed also affects the injury consequences of an accident. At a higher *(impact)* speed, there is a higher risk of accident and more serious consequences. Speed deterrents help prevent accidents by forcing drivers/riders to slow down. When vehicles travel at high speeds, the chances of collisions and severe accidents increase significantly. Road humps and speed cameras act as physical barriers and psychological reminders to drivers/riders to drive at safe speeds.

Speed deterrents, such as road humps and speed cameras,help to slow down vehicles and encourage drivers/riders to follow speed limits, making roads safer for everyone.

Road humps, also known as speed bumps, are physical barriers placed on the road. When drivers/riders approach road humps, they must slow down to navigate over them safely. These humps serve as reminders to obey speed limits and reduce the risk of accidents. They are often found in school zones and residential areas to protect pedestrians, especially children, from speeding vehicles.

Speed cameras are devices that monitor vehicle speeds. They capture images of vehicles exceeding the speed limit, and the data can be used for enforcement purposes. The presence of speed cameras encourages drivers to be more cautious and comply with speed limits to avoid potential fines or penalties.

Both road humps and speed cameras play a vital role in changing driver behaviour and promoting responsible driving. By adhering to speed limits, drivers can prevent accidents and protect vulnerable road users. These speed deterrents not only save lives but also create a safer and more considerate road environment for everyone.

Procedure:

Brainstorm using key questions.

1. What is the meaning of 'speed'?
2. Why speed is important?
3. How can speed be dangerous?

Explain to pupils the following key points:

- Speed is the rate at which someone or something moves.
- Moving at low speed and high speed can be dangerous.

Key reasons why speed deterrents are essential:

1. Accident prevention: Help prevent accidents by forcing drivers to slow down.
2. Protecting pedestrians and vulnerable road users: Make roads safer for these individuals by encouraging drivers to be more cautious and considerate.
3. Reducing severity of accidents: Slower-moving vehicles are less likely to cause severe damage or result in life-threatening injuries, compared to high-speed collisions.
4. Encouraging compliance with speed limits: The visual reminder of speed limits encourages drivers to respect and adhere to these limits.
5. Creating safer school zones: In areas near schools and residential neighbourhoods, road humps and speed cameras are often installed to protect children and residents. Slower traffic around these zones ensures a safer environment for everyone, especially young pedestrians.
6. Changing driver behaviour: Encourage drivers to adopt safer driving habits and promote a sense of responsibility on the road.

Teacher to demonstrate and ask pupils to mime

Outdoor activity:

Divide the class into groups.

Have a track with a starting point and an end point.

Ask pupils of each group to:

1. Walk slowly on the track.
2. Run on the track.

Have a class discussion after each movement is enacted.

Explain that when you walk slowly, you may hinder others and create crowding, and the same

will happen on the road, known as traffic jam, which may cause bumping and pile-up.

If you run altogether on the track, there is the danger of bumping, tripping, and falling; the same could happen when cars move at high speed, leading to accidents.

In order to control traffic movement on the road, there are several speed deterrents which have been put in place. *(Pupils may refer to their Activity Books for the pictures)*

These are:

1. Road sign showing speed limit.

Drivers are warned not to exceed the speed limit mentioned.

2. Both traditional police enforcement (Police patrol) and automated speed control, including the use of mobile cameras - backed up by effective penalties – are needed to complement the other speed management measures to achieve their full effect.

3. Fixed speed and camera zone help to reduce speed at specific places on the road. Road markings for the zone are indicated.

4. Speed humps help to reduce speed at locations where low speed is essential.

Evaluation:

Ask pupils to complete Activity 1 in Pupil's Activity Book.

LESSON 22 | Traffic signs related to speed limit

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Understand the importance of traffic sign to reduce speed.
- Understand the importance of obeying speed limits.
- Identify traffic signs for speed control.

Material(s)/Equipment: Pupil's Activity Book
Venue: Indoors / Outdoors
Duration: 25 minutes

Teacher's Note

Speed limit signs are circular with a white background and a red outer circle. Inside the circle, the number written in black indicates the maximum speed limit allowed on that particular road or highway. For example, "50" inside the red circle, means the maximum speed limit is 50 kilometres per hour.

Procedure:

Recap previous lessons on traffic signs and speed through oral questioning.
Begin by asking pupils if they have noticed different signs on the road while traveling. What do these signs mean? Discuss the purpose of road signs and why they are important for road users, pedestrians, cyclists, pillion riders, riders, passengers, and drivers.

Discussion:

Introduce the purpose of speed limit signs.

1. To ensure safe driving and reduce the risk of accidents by setting a maximum speed that drivers/riders should not exceed.
2. Speed limits can vary depending on the type of road and the location. For example, in school zones, parks, marketplaces, there is a 30-40 Km/H speed limit zone.
3. Exceeding the speed limit can lead to reduced reaction time, less control over the vehicle, and increased braking distance, making accidents more likely.
4. Speed may be below the speed limit, based on road conditions, weather, and traffic flow.

Importance of Speed Limits
Engage the class in a discussion about why speed limits are essential for safety on the road.

Ask questions such as:
1. How do speed limits help prevent accidents?
2. How can driving/riding too fast be dangerous for road users (pedestrians, cyclists, pillion riders, riders, passengers, and drivers)?
3. What can happen if everyone ignores speed limits?

Encourage pupils to share their thoughts and experiences.
Observe and discuss the picture found in the Activity Book, Activity 1.

Key questions.
What is the speed sign?
What is a speed control sign?
What does it tell to drivers/riders?

Teacher's Note

What is the speed sign?
A speed sign is a traffic sign that displays the legal speed limit for a particular stretch of road.

What is a speed control sign?
A speed control sign is a traffic sign that displays the speed limit for drivers in a particular area, helping to control and reduce speed on roads and highways.

Good to know

What do electronic speed signs do?
Electronic speed signs display the speed limit and other traffic information to drivers in real time.

Referring to the pictures in the Pupil's Activity Book -Activity 2, explain the following:

Speed limit sign

Speed control sign – Reduce Speed

Digital speed

Teacher's Note

Digital speed sign is a radar which indicates the speed in real time.

A digital speed sign allows road users to be aware of their possible speeding. These preventive and educational speed signs have much more impact than a static traffic sign.

Evaluation:

Ask pupils to complete Activity 1, 2, & 3 in Pupil's Activity Book.

LESSON 23 & 24 | Road Markings

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Identify selected road markings.
- State the functions of the selected road markings.
- Understand and explain the importance of the selected road markings.

Material(s)/Equipment: Pupil's Activity Book
Venue: Indoors / Outdoors
Duration: 50 minutes

Observe and have a class discussion referring to the Picture of the road scene. Lay emphasis on road markings in the Pupil's Activity Book - Activity 1

Teacher's Note

There are a wide variety of road markings. They come in different shapes, colours, and locations and all have specific meanings.

1. White lines:

- **Single continuous line:** This indicates a no-overtaking zone. Drivers/riders/cyclists are not allowed to cross the line to overtake other vehicles.
- **Broken white line:** This permits overtaking if it is safe to do so. Drivers can cross the line to overtake other vehicles.
- **Double white lines *(continuous)*:** These indicate a no-overtaking zone on both sides of the road. Overtaking is not allowed.

2. Yellow lines:

- **Single continuous yellow line:** This is a no-parking zone but Drivers/riders/cyclists are allowed to stop to pick up passengers or for loading and unloading purposes.
- **Double continuous yellow lines:** Drivers/riders/cyclists are not allowed to stop or park.

3. Stop line:

- A thick white line painted across the road before intersections. Drivers must come to a complete stop behind this line when the traffic signal is red or when there is a stop sign.

5. Zig-zag markings:

- **No Stopping:** Vehicles are not allowed to stop within the area marked by the zig-zag lines. These warn drivers that they are approaching a pedestrian crossing.
- **No Overtaking:** Overtaking other vehicles is strictly prohibited within the area of the zig-zag markings.
- **No Parking:** Parking vehicles within the space marked by zig-zag lines is not allowed.

6. Symbol markings:

- A designated lane for specific vehicle e.g., bicycles, bus, disabled, that is usually marked by a solid white line with the vehicles, symbol/words. Other types of vehicles should not enter such allocated space.

7. Directional arrow markings:

- These are used at intersections or junctions to guide traffic flow in specific directions.

8. **Chevron markings/diagonal strips:**
   - Diagonal markings on the road are used to indicate curves and turns, especially on highways and winding roads.
9. **Yellow box markings:**
   - A road marking in the shape of a box is painted on the road at intersections.
   - No vehicle is allowed to stop on the yellow box.

1. Edge Lines

Edge lines are solid pavement lines along the side of the road. They indicate where the lane ends and where the road shoulder begins.

2. Solid white line / stop line

A thicker white line is less common than the one found alongside traffic lights, and appears next to stop signs.
The marking is a reminder to stop and give way to traffic before moving ahead when it is safe to do so.
This particular white line is used at junctions without traffic lights.

3. Centre line

A two-lane roadway is shown with centre line markings. These can be either solid white line or broken white line markings.

A solid white centre line

A broken white centre line

4. Diagonal stripes

White diagonal stripes are used to separate lanes or to protect traffic turning right.

5. Lane line

Also known as lane dividers, these markings are white in colour and feature short, broken white lines which you should drive within.
You can expect to find them on wider roads where they are used to safely divide driving space.

6. Yellow lines

Single yellow line

Single yellow lines are found at the edge of roads and indicate that drivers should never wait on this section between the times given on nearby signs.

Double yellow lines

Double yellow lines appear on the edge of roads where no waiting is allowed at any time. In some cases, nearby signs indicate seasonal restrictions. You can find them on many busier roads.

7. Yellow box

Yellow boxes indicate that drivers must not enter the box until their exit road or lane is clear. This box indicates the part of the intersection that must – by law – be kept open at all times. Even if you have a green light, if the traffic is stopped on the other side ahead, it is best to wait until there is enough space for you to clear the yellow box.

8. Directional arrows (White)

Directional arrows

These indicate the direction in which drivers must travel when using this lane; they are usually straight, featuring a single arrowhead.

9. Speed zone road markings

These markings set the limit for fixed camera speed control.

10. Road marking for disabled parking space

The above road marking indicates priority parking for the disabled.

Evaluation:
Ask pupils to complete Activity 1 and 2 in Pupil's Activity Book.

LESSON 25 | Right and left turn

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Execute a right turn and a left turn while riding a bicycle.
- Describe how to execute a right turn and a left turn while riding a bicycle.

Material(s)/Equipment: a bicycle and protective gear, cones and markers
Venue: Indoors / Outdoors
Duration: 2 x 25 minutes

Teacher's Note

Use hand signals to indicate the direction of the turn. It is well explained in the Road Traffic *(Cycle)* Regulations *(1966)*.

Any person riding a cycle shall, when about to overtake, turn to the right or left or to stop, signal that he is going to so do in the following manner:

- If about to overtake or turn to right – Extend arm horizontally to the right.
- If about to turn to the left - Extend arm horizontally to the right and raise it.
- If about to stop – Extend arm horizontally to the right and then drop it.

Procedure:

Introduce the theme of the lesson.
Conduct a brainstorming session. You may use the following questions:

- How many of you have already ridden a bicycle on the road?
- How do you execute a right turn?
- How do you execute a left turn?

Note down pupils' responses.
Explain that they need to use hand signals. Use the pictures below.



Explain to the pupils the steps that they need to take when executing a right turn and a left turn.

To execute a right or left turn while riding a bicycle, follow these steps:

1. **Check your surroundings:** Before making a turn, apply the principle SLLT – Stop, Look, Listen, Think - and be sure to scan the area around you for any potential hazards such as vehicles or pedestrians. Make sure to signal your intentions to other road users by using the appropriate hand signals.

2. **Move to the correct position:** When turning right, check over your right shoulder before to ensure that it is safe. Then move to the right side of the lane. When turning left, keep to the left side of the lane.

3. **Slow down:** Reduce your speed to an appropriate level for the turn you are about to make. Be aware of any other road users that might be in your path.

4. Use hand signals to indicate the direction of the turn - Refer to Teacher's Note

5. **Make the turn:** For a right turn, turn the handlebars to the right while leaning your bicycle to the right. For a left turn, turn the handlebars to the left while leaning your bicycle to the left. Keep your eyes up and looking ahead to maintain balance. Be mindful of potholes and other hazards.

6. **Complete the turn:** Straighten your bicycle and return to your normal riding position once you have completed the turn.

7. Remember to always follow the rules of the road and be aware of your surroundings while riding a bicycle.

CLASS ACTIVITY

Executing right and left turn

An outdoor activity to teach pupils to execute a right turn while riding a bicycle could be to simulate the turn using cones or markers on a flat surface, such as a playground. Set up a track that includes a straight section followed by a right turn section and have the pupils practise riding through the track while making the turn correctly.

Once this skill has been mastered, then add a straight section followed by a left turn section to exit the track and have the pupils practise riding through the course while making the left turn correctly.

Evaluation:

Ask pupils to complete Activity 2 in the Pupil's Book.

LESSON 26 & 27 | Ride a Bicycle at T-junctions

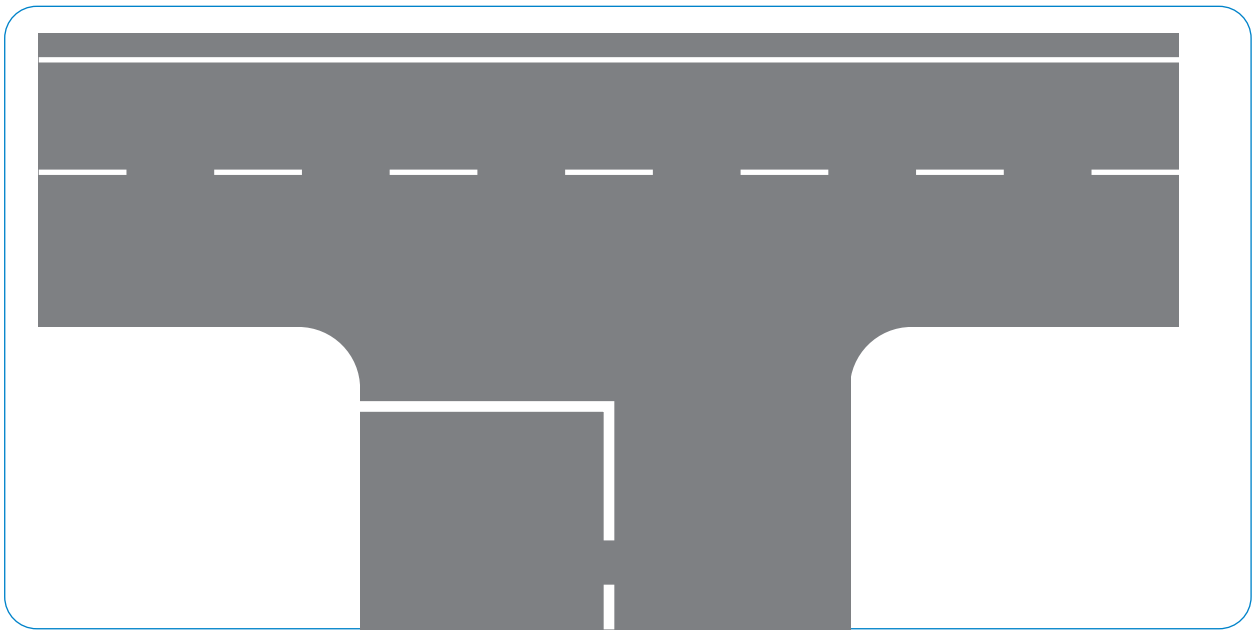
Learning outcome(s): By the end of the lesson, pupils should be able to:

- Ride a bicycle along a road with a T-junction.
- Safely negotiate a T-junction while cycling *(observing, signaling and decision-making skills).*

Material(s)/Equipment: Pupil's Activity Book, White board, markers, chalk and cones
Venue: Indoors / Outdoors
Duration: 50 minutes

Procedure:

- Recap lesson on Hand Signal – left turn, right turn and stop sign – Miming activity.
- Introduce the lesson by explaining the T-junction – refer to the letter T. (Refer to Pupil's Activity Book)
- Draw a T-junction on the white board. Highlight that it is a place where three roads meet, forming a "T" shape. Insert the road markings and road signs.
- Explain that at a T-junction, the road that you are on joins another road at a right angle, so that you have to turn either left or right to continue.



Proceed to explain how to enter a major road from a minor road – taking a right turn.

Teacher's Note

Steps for TURNING RIGHT from a minor to a major road:

Step 1: Approach with caution

- Approach the T-junction on your bicycle, reducing your speed as you get closer.
- Check above your right shoulder before indicating and move from left to the centre of the lane / further to the right and come to a complete stop at the junction to claim your lane. This will indicate to traffic behind you what your intended directional travel is. Avoid being closer to the centre line of the road as vehicles may cut into the space.

Step 2: Signal your intention

- Before making the right turn, use your right arm to signal your intention to turn right. Extend your right arm straight out to the side.

Step 3: Check for traffic

- Look both ways on the main road (the road you're turning onto) for any oncoming traffic. Yield to any vehicles on the main road, as they have the right of way.

Step 4: Make eye contact

- If possible, make eye contact with drivers to ensure they see you before you proceed.

Step 5: Be visible

- Wear bright and reflective clothing, especially if it is dark or visibility is poor. Make sure you are visible to other road users.

Step 6: Make the right turn

- Create an imaginary line leading to the centre of the lane across the junction as a mental guide.
- Once you have checked for traffic and it is safe to turn, start the right turn along the imaginary line. Keep the imaginary line as your guide to navigate the turn smoothly.
- Keep your speed steady and maintain good control of your bicycle.

Step 7: Complete the turn along the imaginary line

- Complete the right turn along the imaginary line, ensuring you are not turning into the path of oncoming traffic.
- Return to cycling at least one arm away from the curb of the pavement on the left-hand side of the road.

Steps for TURNING LEFT from a minor to a major road:

Step 1: Approach with caution

- Approach the T-junction on your bicycle, keep left, reduce your speed as you get closer indicate and come to a complete stop at the junction to claim your lane.

Step 2: Signal your intention

- Before making the left turn, use your right arm to signal your intention to turn left. Extend your right arm and bend it upwards at a 90-degree angle, palm facing the right.

Step 3: Check for traffic

- Look both ways on the main road (the road you are turning onto) for any oncoming traffic. Yield to any vehicles on the main road, as they have the right of way.

Step 4: Make eye contact

- If possible, make eye contact with drivers to ensure they see you before you proceed.

Step 5: Be visible

- Wear bright and reflective clothing, especially if it is dark or visibility is poor. Make sure you are visible to other road users.

Step 6: Make the LEFT turn

- Once you have checked for traffic and it is safe to turn, start the left turn.
- Keep your speed steady and maintain good control of your bicycle.

Step 7: Complete the turn

- Complete the left turn and keep cycling at least one arm away from the curb of the pavement on the left-hand side of the road.

Practical session.

- Set up a track showing a T-junction *(refer to layout above)*.
- Check ABC for safe bicycle riding.
- Teacher demonstrates the above steps on the track, for turning right and left from a minor to a major road.

Pupils then carry out the proper way of riding at a T- junction:

Both – turning left and right.

Evaluation:

Ask pupils to complete Activity 1, 2 & 3 in Pupil's Activity Book.

LESSON 28 & 29 | Changing lanes

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Check behind when changing lanes.
- Describe checking behind when changing lanes.

Material(s)/Equipment: Bicycle and safety gear, cones, and markers
Venue: Indoors / Outdoors
Duration: 2 x 25 minutes

Teacher's Note

One reason why a person riding a bicycle may need to change lanes is to avoid an obstacle such as a parked car, pothole, or debris on the road. Another reason may be to prepare for a turn or to make a left-hand turn at an intersection. Additionally, when riding in a shared lane with motor vehicles, a cyclist may need to change lanes to maintain a safe distance from parked cars, or to position themselves for a right-hand turn. It is important to always signal and check for any traffic before changing lanes on a bicycle.

Procedure:
Introduce the theme of the lesson.

Conduct a brainstorming session. You may use the following questions:

1. Why do riders need to change lanes?
2. What do they need to do?

Note down pupils' responses.
Explain to pupils how to change lanes. You can mime the situations.

When changing lanes while riding a bicycle, it is important to take the necessary precautions to ensure your safety.

Here are some tips to keep in mind:

1. **Look behind you:** Before changing lanes, make sure to look over your shoulder to check for any vehicles or obstacles in your path. If you have a rear-view mirror mounted on your handlebars or helmet, use it to keep an eye on traffic behind you.
2. **Plan your move and signal your intentions:** Use hand signals to let other drivers and cyclists know that you intend to change lanes. Extend your right arm straight out to signal a movement in the right lane or bend your right arm at the elbow to indicate a movement in the left lane.
3. **Check your blind spots:** Be aware of your bike's blind spots, which are areas that are not visible in your mirrors or by looking over your shoulder. Always take a quick glance over your shoulder to check for any blind spots before changing lanes.
4. **Communicate with other road users:** Make eye contact with other drivers and cyclists to ensure they have seen you before initiating action to change your lane. You may use verbal cues such as shouting "Passing on your right" to let others know your intentions.
5. **Choose a safe time to change lanes:** Avoid changing lanes in heavy traffic or at intersections. Instead, wait for a break in traffic before making your move.

CLASS ACTIVITY

Changing lanes

As an outdoor activity on how to change lanes when riding a bicycle, you can set up a simple obstacle track in a parking lot or other open space. Here are the steps:

1. Use cones or other markers to create a straight path with a lane change. Position the markers so that the path is wide enough to ride a bike through without difficulty.
2. Ask the pupils to ride through the straight path at a comfortable speed.
3. At the end of the straight path, position a marker on the left or right side to indicate the direction of the lane change.
4. Instruct the cyclist to signal their intention to change lanes and then change lanes smoothly, following the marked path.
5. Repeat the exercise several times, each time changing the direction of the lane change and adjusting the difficulty level as needed.
6. By practising changing lanes in a controlled environment, the cyclist can develop their skills and confidence before attempting to do so on the road with other vehicles. It is important to always wear appropriate safety gear and follow all traffic laws when riding a bicycle on the road.

Evaluation:

Ask pupils to complete Activity 1 in the Pupil's Book.

LESSON 30 | Stopping at signal lights *(traffic lights)*

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Stop at signal lights.
- Explain how to stop at signal lights.

Material(s)/Equipment: Pupil's Activity Book.
Venue: Indoors / Outdoors
Duration: 25 minutes

Teacher's Note

When riding a bicycle, it is important to obey traffic laws, including stopping at signal lights. Generally, bicycles are subject to the same traffic laws as motor vehicles, meaning that cyclists must stop at traffic lights just as drivers do. It is important to always prioritize safety and follow the rules of the road in the local area. Additionally, cyclists should always be aware of their surroundings, watch for turning vehicles, and be sure to signal their intentions clearly before turning or changing lanes. Obeying traffic laws and practicing safe riding habits can help keep the rider and others safe while riding a bicycle on the road.

Procedure:
Introduce the theme of the lesson.

Conduct a class discussion. Refer to Pupil's Activity Book (Activity 1).
You may use the following questions:

1. What are signal lights?
2. What are the functions of signal lights?
3. What should a rider do when he/she reaches a signal light?

Note down the responses of the pupils.

Explain to the pupils what they need to do when they reach a signal light.

When stopping at signal lights while riding a bicycle, there are several precautions you should take to ensure your safety:

1. When approaching or passing through a signal light, always stay **close** to the curb or edge of the road.

2. Apply both brakes **slowly** and steadily. It is easier to stop when going slowly.

3. Stop upon seeing **amber** lights. Stop safely behind the **white** line. Do not try to ride while amber lights are on as you will risk a collision or a stop in the middle of the intersection.

4. **Stop** completely at red lights. Stay safely behind the white stopping line. Do not try to ride while red lights are on. It is an offence and you may put yourself at risk.

5. Make sure to come to a complete stop **behind** the white stopping line or crosswalk.

6. It is an offence to stop **past** the white line.

7. Use **hand** signals to indicate your intention to turn.

8. Proceed carefully through green lights. Look both ways for pedestrians before crossing or turning. Give **way** to pedestrians if they have started to cross while the signal lights have turned green. It is safer to remain stationary until the crosswalk is clear.

9. Be **aware** of the position of cars around you and take care to avoid any that appear to be turning or changing lanes.

Remind pupil's of the following:

Be especially cautious when riding at night or during times of low visibility, and make sure your bike is equipped with reflectors and lights to increase your visibility.

Wear proper safety gear like a helmet and reflective clothing.

Remember to always follow signal lights and obey all traffic laws when riding a bicycle on the road or in designated bike lanes to reduce the risk of accidents and injury.

CLASS ACTIVITY

Title of class activity

1. One fun outdoor activity that involves stopping at "signal lights" is a game called "Red Light, Green Light". The game involves one person being the "signal light" and the other players being the "bicycles". The signal light person stands at one end of the area with their back turned to the other players, who are lined up at the opposite end of the area. The signal light person yells "green light" and the bicycles start moving towards the signal light person. After a few seconds, the signal light person yells "red light" and the bicycles have to stop moving. The signal light person may also yell "amber light" which means the bicycles should slow down. The first bicycle to reach the signal light person wins and becomes the next signal light.

Evaluation:

Ask pupils to complete Activity 2 in the Pupil's Book.

LESSON 31 | Riding in roundabouts

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Describe how to give way at a roundabout.
- Know the basic rules for entering, navigating, and exiting a roundabout.

Material(s)/Equipment: A whiteboard or poster paper, markers, index cards or small pieces of paper, pens or pencils

Venue: Indoors / Outdoors

Duration: 25 minutes

Teacher's Note

A roundabout is a type of circular intersection where traffic flows in one direction around a central island. *It is a circular structure in the road at a place where several roads meet.* It is designed to reduce traffic congestion and improve safety. Roundabouts are typically used in areas with high traffic and are intended to keep traffic moving with fewer delays and fewer conflicts between vehicles. Vehicles/bicycles entering a roundabout must *give way* to those already in the roundabout, and drivers/riders must follow the direction of the flow of traffic.

Procedure:

Introduce the theme of the lesson.

Conduct a brainstorming (Refer to Activity 1) session. You may use the following questions:

1. What is a roundabout?
2. How do riders ride in roundabouts?

Note down pupils' responses. You can explain to pupils what they are expected to do when they ride in roundabouts.

3. Riding in roundabouts can be a bit tricky, but following some basic rules can help ensure your safety. **Here are some tips and guidelines to help you ride through roundabouts safely:**
   a. Look for signs and pavement markings that indicate the presence of a roundabout.

   b. Slow down as you approach the roundabout.

   c. Always yield the right-of-way to vehicles already in the roundabout. This means waiting for a safe gap in traffic before entering. Only join when it is safe.

   d. Always keep your speed in check and enter the roundabout at a slower pace.

   e. Stay in your lane and do not change lanes within the roundabout.

   f. Do not stop in the middle of the roundabout.

   g. Use hand signals to indicate your exit from the roundabout.

   h. If you are taking the last exit or effectively turning right, you should signal right and ideally be in the right-hand lane.

   i. Shift to the left-hand lane before the last exit where you signal left to turn off the roundabout.

   j. Keep a lookout for other vehicles as some driver or rider may join in at the roundabout even though the priority is yours.

   k. Signal left when you will exit and make sure no vehicle is overtaking on the inside.

   l. Be sure to wear a properly fitting helmet, and use lights and reflective gear if riding during low-light conditions.

   m. Stay alert and vigilant, and always be prepared to react to any unexpected situations.

CLASS ACTIVITY

Title of class activity

1. As an outdoor activity on how to ride in roundabouts, you could set up a simple roundabout in the playground.
2. Use cones or markers to create the roundabout.
3. Have the rider ride through the straight path at a comfortable speed.
4. Once the rider reaches the roundabout, instruct the rider to follow all the steps to ride in a roundabout and to exit at the 2nd exit.
5. By practicing riding in roundabouts in a controlled environment, the riders can develop their skills and confidence before attempting to do so on the road in real situation with other vehicles.

Evaluation:

Ask pupils to complete Activity 2 in the Pupil's Book.

LESSON 32 | Cooperative Cycling *(Riding Together Safely)*

Learning outcome(s): By the end of the lesson, pupils should be able to:

- Understand the importance of cooperative cycling.
- Develop their skills at riding safely as a group.
- Explain how to cycle in a group.

Material(s)/Equipment: Bicycles and safety gear
Venue: Indoors / Outdoors
Duration: 25 minutes

Teacher's Note

Cooperative cycling is equivalent to "cycling with other riders". It typically refers to group cycling, where a group of people ride their bicycles together. Group cycling can be a fun and social way to enjoy cycling and to improve your fitness and cycling skills.

Procedure:

Introduce the theme of the lesson.

Group coorporative cycling can be a lot of fun, but it requires everyone to work together and follow basic safety guidelines. With good communication and a commitment to ride cooperatively, you can have a safe and enjoyable experience.

Conduct a brainstorming session, refer to Pupil's Activity Book.

You may use the following questions:

1. Have you ever ridden together with your friends?
2. How did you do it?

Note pupils' responses. Explain to them that when they ride in groups, they need to pay attention to the following:

The key principles of riding together safely include:

1. Ride in a single file line: Maintain a steady course and avoid swerving or drifting within the group. If you need to move out of line, signal your intention and check behind you before doing so.

2. Ride predictably: Avoid sudden movements or changes in speed or direction and signal your intention to turn or stop.

3. Keep a safe distance: Leave enough space between you and the rider in front of you to allow for sudden stops or changes in speed.

4. Avoid half-wheeling: Half-wheeling is when you ride slightly ahead of the person next to you. This can create tension within the group, you should always ride one after the other and maintain a consistent pace.

5. Communicate effectively: Use hand signals, verbal cues, bell and eye contact to communicate intentions, such as turns, stops, or hazards, with other cyclists and motorists. If you need to communicate something longer, move to the back of the group and speak clearly.

6. Be aware of your surroundings: Keep an eye out for cars, pedestrians, and other obstacles, and be prepared to adjust your riding accordingly.

CLASS ACTIVITY

Let us work together:

1. Divide the class into small groups of four or five pupils.
2. Give each group a piece of paper and a pen or pencil.
3. Ask each group to come up with a list of five benefits of group cycling.
4. Once they have their list, ask them to come up with three potential challenges or problems that could arise during a group cycling activity.
5. Next, ask each group to brainstorm three potential solutions to each of the challenges they identified.
6. Finally, ask each group to present their list of benefits and their solutions to the challenges to the rest of the class.

Evaluation:

Ask pupils to complete Activity 2 and Activity 3 in the Pupil's Book.

ROAD SAFETY EDUCATION

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