



SCIENCE @ ST PIUS  
TERM 4  
PHYSICAL SCIENCES

**PRE-PRIMARY**

**This term, students will examine the way objects move and how their size and shape influence this.**

Students will consider the following key questions

- *How do humans and other animals move?*
- *How do objects move? Can they move by themselves?*
- *How does the size and shape of an object change how it rolls?*
- *How does the size and shape of an object change how it slides?*
- *How does the size and shape of an object change how it bounces?*
- *How does the size and shape of an object change how it spins?*

**YEAR 1**

**This term, students will consider how light, and sound are produced by a range of sources that can be sensed.**

Students will consider the following key questions

- *What is light? What is sound? What parts of our body do we use to detect light and sound?*
- *What are some sources of light?*
- *What is the difference between natural and man-made /artificial sources of light?*
- *How does light help us to see?*
- *Does light help us see colours/*
- *What is sound? How can we hear or feel sound?*
- *How can sounds be made?*
- *How are sounds different?*

**YEAR 2**

**This term, students will consider how a push or a pull affects how an object moves or changes shape.**

Students will consider the following key questions

- *What is a force? What does it do?*
- *What is the difference between a push and a pull?*
- *Does the amount of force applied to an object affect how it moves or changes shape?*
- *Does the size and/or mass of an object change how much force is needed to move?*
- *Why do objects fall to the ground when there is no surface for them to sit on?*
- *How do pushes and pulls affect objects in water?*

### **YEAR 3**

**This term, students will consider how heat can be produced in many ways and can move from one object to another.**

Students will consider the following key questions

*What does it mean if something is hot?*

*Is heat the same as temperature?*

*What is heat?*

*Is it visible?*

*What is temperature?*

*What does a thermometer do?*

*How can heat be created?*

*How does heat move?*

*What is conduction?*

*What materials are good conductors?*

*What are insulators?*

*What materials are good insulators?*

### **YEAR 4**

**This term, students will consider how forces can be exerted by one object on another through direct contact or from a distance.**

Students will consider the following key questions

*What is a push and a pull force? How does the amount of direct force applied to an object affect its movement?*

*What kind of force is gravity?*

*Is there more than one force acting on an object?*

*What is air resistance?*

*What is magnetic force?*

*How can it move objects?*

*What is static electricity?*

*How does it move objects?*

## **YEAR 5**

**This term, students will consider how light from a source forms shadows and can be absorbed, reflected and refracted.**

Students will consider the following key questions

*What is light and how does it help our eyes to see?*

*Why are some objects coloured and some objects see-through?*

*Why can we only partially see through some objects?*

*What is white light and how does it refract through transparent objects to form rainbows?*

*Why do we see objects in colour?*

*How do shadows form and why are they not always the same size or shape?*

*How do coloured shadows form? Are they always the same colour as the object or the light source?*

## **YEAR 6**

**This term, students will consider how electrical energy can be transferred and transformed in electrical circuits and can be generated from a range of sources.**

Students will consider the following key questions

*What non-renewable energy sources are used to generate electricity? How do fossil fuels generate electricity?*

*What renewable energy sources are used to generate electricity? How do wind and water generate electricity?*

*How does solar energy generate electricity?*

*How can the flow of electricity be shown in a circuit diagram?*

*What materials can be used to make an electrical circuit? What materials are conductors and Insulators?*

*of electricity?*

*What is a switch and how does it work? How is it shown in a circuit diagram?*

*How does a light bulb work? What are the features of light globes?*