 Physical World

2012 Science and Technology K-6 Syllabus:

NE - Students explore and learn about science as a unique way of answering questions and finding out about phenomena in the natural world, and the importance of scientific evidence in decision making and problem solving. Students identify that many different people from different cultures make contributions to developments in scientific knowledge. They recognise the significance and influence of science and technology in their world.

S1-S3: Physical World (PW) – students develop their understanding of heat energy, electricity, light and sound. They learn that forces affect the movement of objects and they discover how people can use the knowledge about the transfer of heat energy and transformation of electricity in their everyday life.

Science and Technology K–6 Syllabus 2012  
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2017 Science and Technology K-6 Syllabus:

The Physical World strand explores the physical characteristics of objects and how this affects their movement. Light, sound and heat are identified as forms of energy that may be transferred and transformed, and explore the difference between contact and non-contact forces.

Students develop knowledge and understanding of forces, energy and the properties of materials and their behaviour on the performance of designed engineering solutions. They investigate how electrical energy can control movement in products and systems and learn how engineered products, services and environments can be designed and produced sustainably.

[Science and Technology Syllabus K–6 Syllabus 2017](http://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-and-technology-k-6-new-syllabus)  
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| Stage | Outcome 2012 | 2012 Science and Technology K-6 Syllabus | Outcome  2017 | 2017 Science and Technology K-6 Syllabus | What is different? |
| --- | --- | --- | --- | --- | --- |
| Early stage 1 | Ste-6NE | identifies that the way objects move depends on a variety of factors | STe-5PW-ST | observes the way objects move and relates changes in motion to push and pull forces |  |
| Stage 1 | St1-6PW  St1-7PW | describes some sources of light and sound that they sense in their daily lives  describes effects of pushes and pulls on objects they encounter | ST1-8PW-S  ST1-9PW-ST | describes common forms of energy and explores some characteristics of sound energy  investigates how forces and energy are used in products |  |
| Stage 2 | St2-6PW  St2-7PW | identifies ways heat is produced and that heat moves from one object to another  describes everyday interactions between objects that result from contact and non-contact forces | ST2-8PW-ST  ST2-9PW-ST | describes the characteristics and effects of common forms of energy, such as light and heat  describes how contact and non-contact forces affect an object's motion |  |
| Stage 3 | St3-6PW  St3-7PW | describes how scientific understanding about the sources, transfer and transformation of electricity is related to making decisions about its use  uses scientific knowledge about the transfer of light to solve problems that directly affect people's lives | ST3-8PW-ST  ST3-9PW-ST | explains how energy is transformed from one from to another  investigates the effects of increasing or decreasing the strength of a specific contact or non-contact force |  |