

## Science Breakdown for Year 3 for 2017

### Term 1 – Chemical Sciences – Melting moments

Every day we see or use things that have been melted or frozen, heated or cooled. All around us are items that we find both useful and attractive that have been moulded into different shapes using heating and cooling. These can range from cast iron frying pans and plastic rubbish bins to chocolate bilbies. Understanding the properties of materials and how they change state under different conditions can help materials scientists to develop even more extraordinary products to help improve our quality of life.

**ACSSU046** - A change of state between solid and liquid can be caused by adding or removing heat

### Term 2 – Earth and Space Sciences – Night and Day

What causes night and day? The rising of the Sun and the Moon are daily reminders of the awe and wonder, beauty and power of the universe. Studying the relationships between the Sun, Earth and Moon helps us understand how we experience day and night on Earth. It also helps us understand directions in terms of North, South, East and West, how time is based on the apparent movement of the Sun across the sky and how time can be determined using a sundial.

**ACSSU048** - Earth's rotation on its axis causes regular changes, including night and day

### Term 3 – Biological Sciences – Feathers fur or leaves?

What is that? Is it alive? Is it similar to other things I know? Humans have always sought to make sense of the world around them by grouping things they see, for example as edible, threatening or useful. Scientists develop classification systems to try to understand the diversity of life and how species are related throughout history. As more and more species disappear from the face of the Earth, we are caught up in a race to discover what we never knew we had.

**ACSSU044**—Living things can be grouped on the basis of observable features and can be distinguished from non-living things.

### Term 4 – Physical Sciences – Magnetic Moves

Heat is important to us in many ways in our everyday lives. We use heat in practical ways, such as drying our hair, cooking our dinner and warming our water. We enjoy the feel of the Sun's warmth on our skin on a spring day or the satisfying warmth of holding a cup of hot chocolate on a cold winter's night. But we also know about the dangers of heat and react instinctively when we touch a hot stove or walk barefooted on hot sand. However, heat also preoccupies us. We worry about things being too hot or too cold—the daily temperature, our coffee, our food, the water in the shower, how we sleep.

**ACSSU049** - Heat can be produced in many ways and can move from one object to another