

Manor Primary School Knowledge Organiser –KS1 Science

Topic: London's Burning

Phase: KS1

Strand: Scientists and Inventors

What should I already know?

- That when we wash our hands, they will be clean.
- Some basic needs of humans (food, water)
- Some basic ways to be healthy
- That the weather changes and we can have hot and cold times of the year (link to seasons)
- The names of some common every-day materials and their properties.

At the end of the unit, I will be able to:

- Name some famous scientists and inventors linked to the KS1 science curriculum and explore how these scientists are diverse.
- Use observations and ideas to suggest and answer questions
- Explain and discuss if doctors are scientists
- Find out about Elizabeth Garrett Anderson and why she is a significant person.
- Describe how and why we should wash our hands
- Investigate how germs spread
- Explain what Louis Pasteur found out about germs.

We are MANOR! As Scientists we will...

Manners

Develop a respect and understanding for the natural world, its people, animals and plants. Share ideas, celebrate good work, value others' contributions, or discussions and debates.

Aspiration

Learn by being challenged in a series of well-designed scientific enquiry and investigation tasks linked to meaningful contexts and develop a knowledge of scientists and careers to broaden our horizons. Be aspirational in developing scientific knowledge and conceptual understanding through biology, chemistry and physics.

Nurture

To recognise that we live in a wonderful world made up of many different people and living things. We will develop an appreciation and respect for the diverse world and environment in which we live, showing care and compassion for the environment around us.

Open-Mindedness

We will be open-minded so that we can conduct experiments or observe what is happening in order to see patterns that might emerge or to gain new knowledge. We will use our curiosity and learn to wonder why something behaves a certain way.

Resilience

Engage confidently with the science curriculum and learn that anything is possible and failure is not something to fear but to learn from. We will develop our scientific enquiry and investigation skills with patience and care, repeating investigations to check the accuracy of results.

Types of Scientists – Can you name any other types of scientists?

Botanists - study Plants



Hydrologists - study water



Zoologists - study animals



Paleontologists -study fossils



Ecologists - study living things & the environment



Meteorologists - study the weather



Famous Scientists

Louis Pasteur (1822-1895) was a French biologist who discovered a process called pasteurization and worked on vaccinations to stop people getting ill.



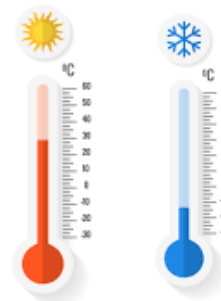
Elizabeth Garrett-Anderson (1836- 1917) studied Science and became England's first female doctor.



Sir David Attenborough (1926 -) is a British naturalist, ecologist and zoologist who has spent his whole life dedicated to educating others about our wonderful world and its animals including being a leading figure in the fight against plastic pollution and other environmental issues that are damaging our planet.



Anders Celsius (1701-1744) was a Swedish astronomer who developed the scale in which we measure temperature. We measure how hot or cold something is in degrees Celsius.



Scientists and Inventors Quiz

Use the Knowledge Organiser to answer these questions.

| Question | | Answer |
|----------|--|--------|
| 1 | What do botanists' study? | |
| 2 | Who became Britain's first female doctor? | |
| 3 | What do we call a scientist that studies animals? | |
| 4 | What measurement do we use to measure the temperature? | |
| 5 | Which scientist worked on vaccinations to stop people getting ill? | |

Vocabulary

| | |
|------------------------------|--|
| inventor | An inventor makes or discovers a new way of doing something. They might make something new. |
| scientist | Scientists study the world around us, the people and animals in it as well as studying space. They do this by looking and doing experiments. |
| observation | To watch closely |
| germs | Tiny living things that can cause diseases. |
| temperature | How hot or cold something is. In the UK we measure temperature with a thermometer and measure the temperature in degrees Celsius. |
| vaccination | A fluid that helps your body to become immune to a disease caused by certain germs |
| investigation/ experiment | To try to find out the facts about something by observing, testing and collecting results. |