MRI stands for “Magnetic Resonance Imaging”, and is a type of scanning which allows us to look inside the body. Getting an MRI scan is very common, and people can have them for many different reasons. This report will talk about why people get MRI scans, how they work, and how they help us get better.

MRI scanning is a way of taking many detailed pictures of the inside of the body. During a scan, pictures will be taken at many different angles, which can be better than pictures taken by X-rays or CT scans. This gives us 3D detailed images of anatomy, which can be used to detect or diagnose a disease and help with treatment. People can get MRI scans for many different reasons,

Did you know?
The main magnet in an MRI can create a magnetic field that is 1000-4000 times stronger than the Earth’s magnetic field.

Japan owns the most MRI scanners worldwide per person, with 43.1 units per million people.

Can you guess which fruit/vegetable these MRI scans show?
Did you know?
The first successful MRI scan performed on a live human patient was performed on July 3rd, 1977.

A baby has been born within an MRI machine.

Over 30 million MRI scans are done each year.

Remember those colourful magnets stuck to your fridge? MRI scanners use that same magnetic field - but much, much stronger. As the body is made up of 70% water, and water is also known as H2O and contains lots of hydrogen, there is lots of hydrogen moving around randomly within the body. When a person goes into an MRI scan, a very strong magnetic field using radiowaves is applied - causing different levels of movement of hydrogen in the body. The computer then translates this into an image.

Some other scenarios where MRIs can be used for are:

- Looking at cancers and assessing how much they have spread, or their size, to help with surgery and treatment.
- Assessing the spinal cord for infection and tumours.
- Looking at damage in joints like the knee or shoulder, to help surgeons plan how to fix a joint.
- Looking at the brain for signs of brain damage (e.g. from a stroke).

Answers for quiz: Tomato, pineapple, corn, onion, cucumber.