



Year 6 Home Learning – Autumn Term 1

Science: Light Theory. During this project, we will learn about how light travels, how we see things and investigate reflections and refraction. To enhance this learning, we ask children to choose a project from the choices below.

Activity ideas

1. **The Eye:** create a 2D or 3D picture or model of the eye, ideally with labels to identify the different parts of the eye and be able to talk about the functions of these parts.
2. **Bioluminescence:** What is this form of light? Where can we find it in nature? Create an information project / fact file / report about this natural light source.
3. **How can you see around corners? Make a periscope.** Research how you can make your own periscope e.g. <https://learning.sciencemuseumgroup.org.uk/resources/periscope/> Bring in and show the class how it works and talk about how you made it.
4. **Have fun with shadows: How are shadows formed?** Learn how to make cool shadow animals and shapes using your hands; Create a booklet or poster to teach others how to copy these.
5. **Optical illusions:** How can you trick the human eye? Research different optical illusions and form your own collection to try out on your peers at school. See the examples below, as one that could form part of your project homework.

You'll need

White cardboard
Pencils or colouring pens
Straw or pencil
Scissors
Glue/tape



Instructions

Cut out two squares from a sheet of white cardboard.

Draw a fish tank on one piece of card and a fish for the tank on the second piece.

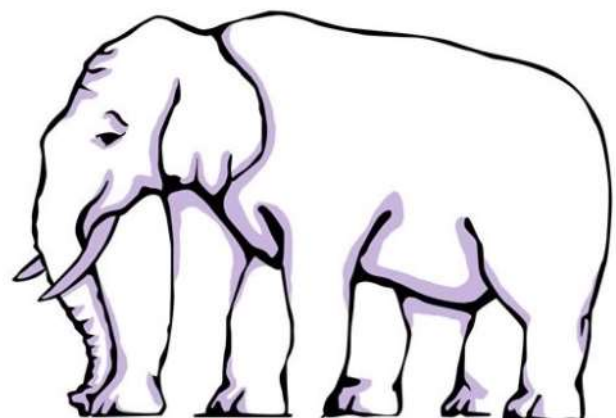
Glue or sellotape a pencil or straw in between the two pictures.

Hold the pencil between your palms and rub your hands to make the picture spin around.

Why does it work?

This clever optical illusion lets you turn two pictures into one! Did you know your brain uses short cuts in order to process all the millions of things you see at any one time. An optical illusion "tricks" your eyes and brain.

When you spin the pencil your brain sees one image first and then the second image before it finishes processing the first, so you see two images at the same time.



Elephant Legs

How many legs do I have?

ANSWER

6. **History: The story of the light bulb... who invented it?** Was it actually Thomas Edison? Research and present your findings in an information report or fact file poster.