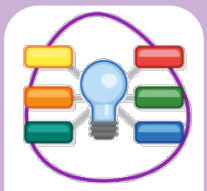
Purple Mash Computing Scheme: Knowledge Organiser

Year 6
Networks

Key Learning

- To understand what a computer network is and identify examples of networks at home, school and in the wider world.
- To understand the difference between the internet and the World Wide Web and explore the services they provide.
- To explore how the internet can be used for communication and collaboration, and how to do this safely and respectfully.
- To explore who is in charge of the internet and how rules and website blocking can affect people, society and online platforms.

Key Resources


2Connect


2Quiz

Key Vocabulary

Email
A method of sending messages over the internet.

Network
A group of connected computers and devices that can share information.

Web Browser
A program used to look at websites.

Internet
A global WAN that connects millions of computers and networks around the world.

Router
A device that connects networks together to allows them to communicate.

Website
A collection of pages of information on the Web.

Internet Chat
Instant messaging in real-time.

Video Call
Seeing and hearing someone live on your screen.

Wi-Fi
A wireless way to connect devices to a network.

LAN (Local Area Network)
A network in a small area like a home, school, or office.

WAN (Wide Area Network)
A network that covers a large area, like the internet.

World Wide Web (WWW)
A service on the internet that includes websites and web pages.

Purple Mash Computing Scheme: Knowledge Organiser

Year 6
Networks

Key Images


Local Area Network


Wide Area Network


Router


Chrome


Safari


Firefox


Edge

Key Questions

What is the difference between a LAN and a WAN?

A LAN (Local Area Network) connects computers and devices in a small area like one building, such as a school, office or home.

A WAN (Wide Area Network) connects computers across large areas, like different cities or countries, often using the internet to link them together.

What is the difference between the internet and the World Wide Web?

The internet is the global network that connects computers together.

The World Wide Web (WWW) is part of the internet and is made up of websites and web pages you can visit.

Why does a school network filter out access to some websites?

A school network filters some websites to keep children safe online.

It blocks harmful, distracting, or inappropriate content, helping students focus on learning and protecting them from dangers like scams or viruses.

Purple Mash Computing Scheme: Knowledge Organiser

Year 6
Graphing

Key Learning

- To create comparative bar charts using graphing software.
- To create pie charts using graphing software.
- To create line graphs using graphing software.
- To present data in graphs to support an argument.

Key Resources


2Graph



2Calculate

Key Vocabulary

Chart
A diagram that represents data. Charts include graphs and other diagrams such as pie charts or flowcharts.

Comparative Bar Chart
A bar chart displaying more than two datasets, it can be known as a comparative bar chart or multi-dataset bar chart.

Data
A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

Dataset
A collection or related numbers or values e.g. money raised each month for a specific charity.

Pie Chart
A circular chart divided into segments which each represent a portion of the total amount.

Dual Bar Chart
A bar chart that displays two sets of data for each category to help provide easy comparisons between data sets.

Line Graph
A graph used to display information which can change over time. For example, temperature at different times of the day.

Purple Mash Computing Scheme: Knowledge Organiser

Year 6
Graphing

Key Images



Set Scale


Add Column


Add Row


Notes


Pie Chart


Line Graph


Bar Chart


Export

Key Questions

What is graphing software?

Graphing software such as 2Graph can be used to create graphs. Instead of someone having to draw and plot a graph, graphing software does this for them.

What are the advantages of graphing software?

One of the main advantages to using software is the time it takes to make a graph is significantly reduced. Additionally, the ability to easily update data and make changes without having to draw a graph from scratch.

What are some of the key features?

Key features include being able to select between chart types at the click of a button as well as being able to change scale intervals without having to redraw a graph.

How can graphs be used to solve a problem?

Instead of looking at a table of data, graphs can show obvious trends visually. Because of this visual nature, problems can be identified and solutions found. For example, someone might see that more ice creams are sold in one month so knows to then order more.

Language: French | Teaching Type: Progressive | Unit: Une bonne santé







Unit Objective:
To express aspects of a healthy lifestyle in French, whilst promoting good physical and mental health.

By the end of this unit, in French, we will be able to:

- Recall 10 sentences expressing good habits for a healthy lifestyle.
- Apply adverbs of frequency to extend our sentences.
- Apply the negative structure '**ne...pas**' *(do not)* as well as conjunctions to the 10 sentences.
- Apply the impersonal structure '**il faut**'... *(It is necessary to)* to express sentences in general terms.

It will help if we already know:

- The letter sounds (phonics & phonemes) from '**Phonics & Pronunciation**' lessons 1, 2, 3 & 4 .
- Grammatical points introduced from **Early Language** and **Intermediate** units: 1st person present tense verbs, a negative structure & conjunctions.

Skills we will develop:

- Transferable language - Understand that the adverbs and conjunctions learned can be used in many different contexts.
- Extension of language - Learn how to develop our sentences to make them longer and more interesting using conjunctions, adverbs, a negative structure (do not) and/or an impersonal structure.
- Manipulation of language - Aim to be creative by integrating all elements of newly learnt language alongside recycled language into original and personal output in either spoken or written forms (here in the form of an informative leaflet).

Activities offered:

- Listening/Reading matching tasks
- Extended, diagnostic Listening tasks
- Longer Reading texts with true/false questions
- Speaking pair work/role-plays
- Gap-fill tasks
- Word re-ordering tasks
- Grammar-specific focused tasks
- Translation tasks
- Creative Writing task

Grammar we will learn & revisit:

- Changes in verbs - Targeting 10 verbs in the 1st person singular in the context of a healthy lifestyle and changing these to their infinitive verb forms e.g. **'je bois' → 'boire'**
- The impersonal structure '**il faut**' + infinitive verbs to express sentences in general terms.
- The negative structure in French **'ne...pas'**.

Phonics & pronunciation we will see:

- **qu** sound in 'é**qu**ilibré'
- **en** sound in 'pr**en**ds' and 'mom**en**ts'
- **an** sound in 's**an**té', 'm**an**ge' and 'écr**an**'

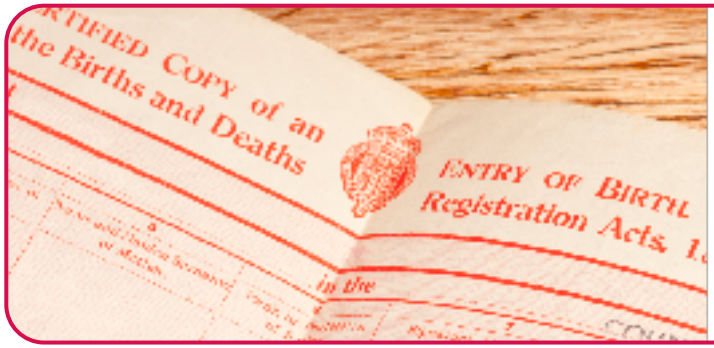
Vocabulary we will learn & revisit:

10 sentences expressing good habits for a healthy lifestyle, adverbs of frequency, the negative structure **'ne...pas'** and conjunctions in French.

History - What can the census tell us about local areas?

census	An official survey recording information about a population.
decade	Ten years.
Head of Household	The main person responsible for earning money and making important decisions for the household.
historical enquiry	The process of investigating the past by asking questions, examining sources and piecing together how things happened.
inference	Using the clues in sources to form an idea.
local history	The study of the history of an area, looking at its past events, people and changes over time.
occupation	A person's job or profession.
politics	Activities or ideas involved in in making decisions for a country, city or group.
reliable	Something or someone that can be trusted.
suffrage	The right to vote in political elections.

Key vocabulary



Birth, marriage and death records not only identify and confirm births, marriages and deaths but also give extra information such as who witnessed marriages and people's occupations.

What sources can provide information about the local area?



The census is a survey collecting information from every household in the country. It can be used to focus on specific people and places or to identify changes in a particular household over a period of time. It contains information such as the names of people living in a household, their ages, occupations, places of birth, their relationship to the head of household and the number of rooms in a dwelling.

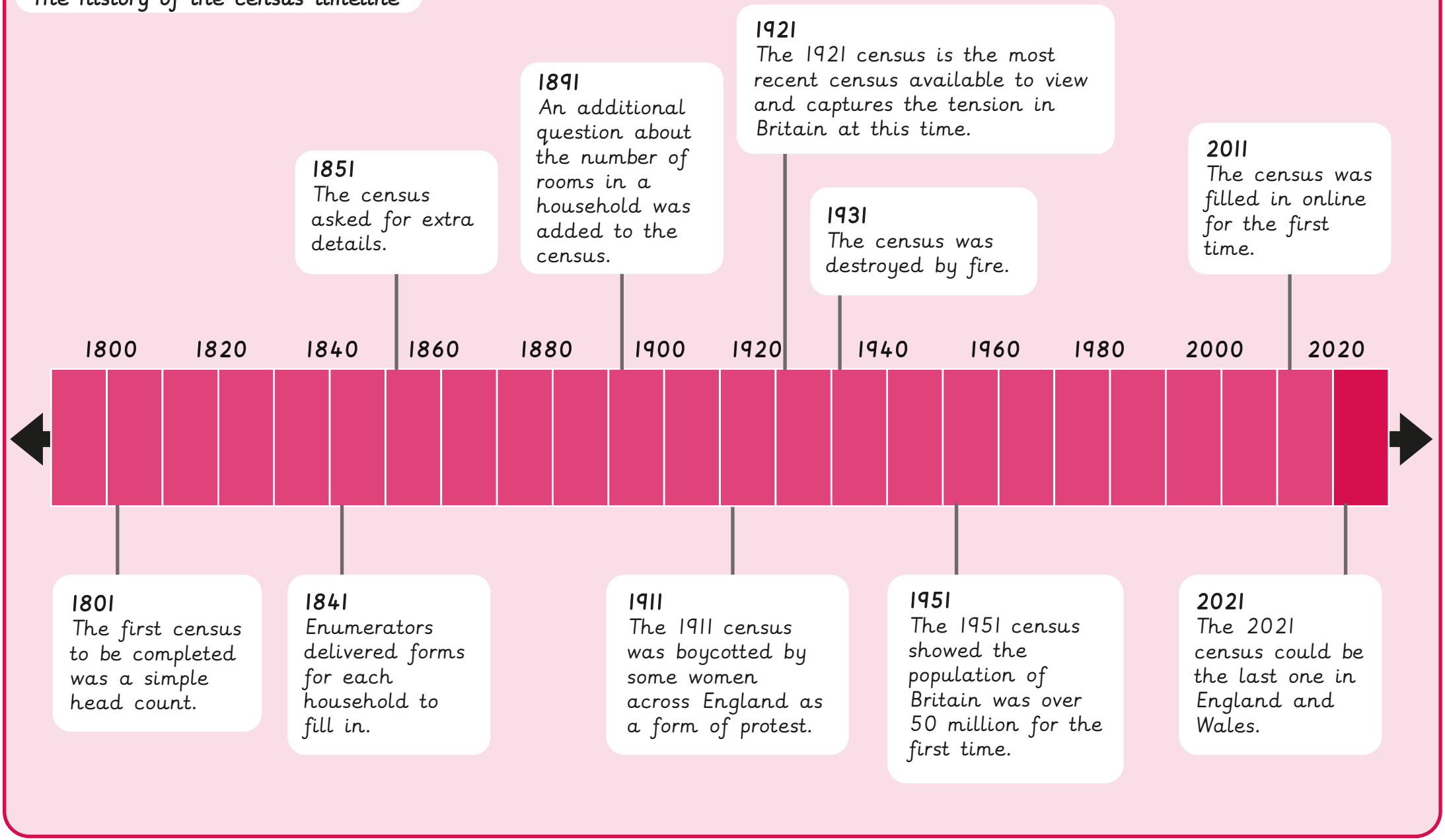


Old maps or plans of the local area show what it was like in the past and allow people to identify how the local area has changed.

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History - What can the census tell us about local areas?

The history of the census timeline



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Basketball Knowledge Organiser - Year 6

Prior Learning: In Year 5, children further developed their dribbling skills to move with control and at different speeds and direction, with either hand. Children learned how to step, pivot and pass. They also learned ways of protecting the ball while static and dribbling. They looked at effective defensive stances. They learned how to shoot accuarately using the BEEF technique. They also developed their qualities of leadership and competition by participating in game of mini basketball.

Key Skills

Physical Me

Throw
Catch
Dodge
Run
Dribble
Agility
Balance
Co-ordination
Jump
Speed





Thinking Me

-To make decisions in the game
-Evaluate and improve my performance

Value Me:

-Teamwork
-Perseverance

Social Me

-Embrace the rules
-Communicate

Key Knowledge

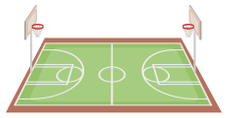


Weave - To move in and out of play

Evaluate- Looking at your strengths and areas to improve in your performance

Agility- To be able to change direction quickly. In basketball you need to be agile while dribbling the ball

Baseline- The back line (where the basket/backboard is)



Our Basketball Rules:

Double Dribble:
When a player dribbles the ball with two hands at the same time or starts to dribble again after stopping

Out of Bounds:
If a team lose possession of a ball and it goes out of bounds then a free pass is awarded to the opposition

Tip Off:
To re-start or put the ball in play by throwing it up between two opponents

Traveling:
When a player takes too many steps with the ball in their hands without dribbling the ball.

Shooting:
If a shot is successfully scored two points are awarded.

Key Vocabulary

- Weave
- Agility
- Gladiators
- Contestants
- Baseline
- Accuracy
- Evaluate
- Referee
- Travelling

Quicksticks Knowledge Organiser - Year 6

Prior Learning: In year 5, children developed their dribbling skills and were introduced to the Indian dribble. They recapped how to pass and move. They also recapped their tackling skills and were introduced to some more advanced ways to tackle. They played small sided quicksticks games and practiced their attacking, marking and defending skills in these games.

Key Skills

Physical Me

Running
Speed
Strength
Reaction
Passing

Agility
Balance
Co-ordination
Power

Thinking Me

- Select and apply my skills
- Evaluate performance
- Decision making

Value Me:

-Determination
-Passion

Social Me

- Helping others
- Accepting and embracing rules

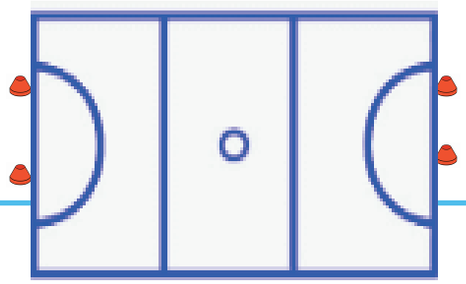


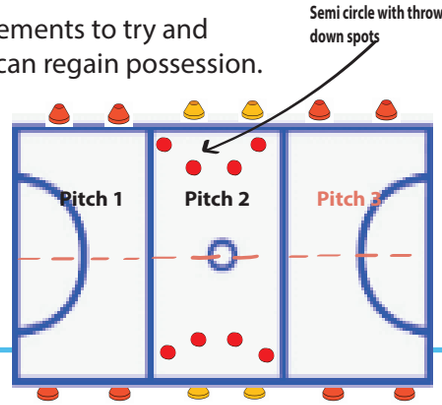
Key Knowledge

Tactics - Actions and strategies are planned to achieve an overall objective – in sport that objective is predominantly to win

Tackling - When tackling, players should **only hit the ball** with their stick and should not hit the other player's stick.

Marking- To mark a player you follow their movements to try and stop them shooting or passing, and so that you can regain possession.





Quicksticks Rules:

Start of Game:
One team being given a centre pass

Restart the game:
Centre pass is taken by the team who has not scored

A free pass (the ball must be taken from where the offence took place)

If a ball crosses the sideline, a free pass is taken from the team that did not touch the ball last.

-You can pass or dribble onto the pitch from a sideline

FREE PASS to the other team:

- If a ball crosses the back line off an attacker, a free pass is taken by the defending team from the top of the shooting circle/area

- If a ball crosses the back line off a defender: the free pass shall be taken by the attacking team from the corner

- If sticks raised above waist/knee height
- If uses rounded side of the hockey stick
- If you obstructs attacking players with the body
- Contact with another player
- Intentionally uses any part of their body to play the ball

Key Vocabulary

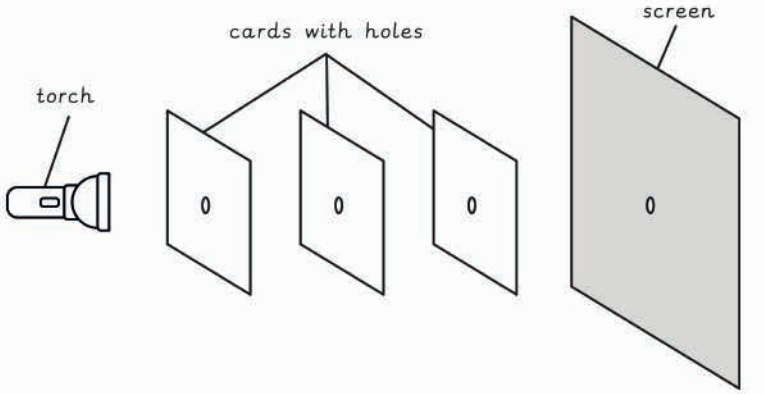
- Chicane
- Accuracy
- Angles
- Marking
- Improve
- Tactically
- Demonstrate
- Possession
- Target

Science - Light and reflection

light	A store of energy that can be seen with our eyes.
light source	Where light comes from.
light ray	A narrow beam of light.
luminous	Something that gives off light.
non-luminous	Something that does not give off light.
transparent	A material that allows light to pass through with minimal scattering or reflection so an object is clearly visible.
translucent	A material that allows some light to pass through. Light may be scattered, causing objects behind to appear fuzzy or distorted.
opaque	A material that blocks or absorbs all light, preventing objects on the other side from being seen.

Light travels in a **straight** line.

The holes must line up exactly for the light to pass through and show on the screen. This is because light cannot move around objects – it travels in a straight line.

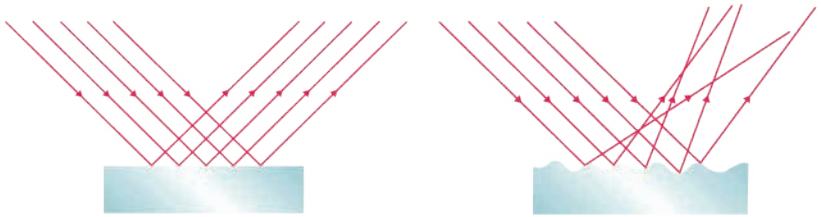


Shadow: a dark area caused by something blocking the light.

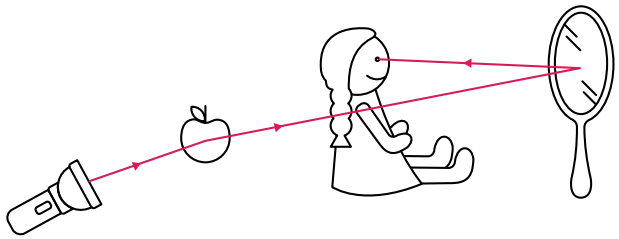


A **shadow** is formed when an **opaque** object is in the pathway of light because light travels in straight lines.
Shadows have the same shape as the objects that cast them.
The size of a shadow changes as the light source moves.

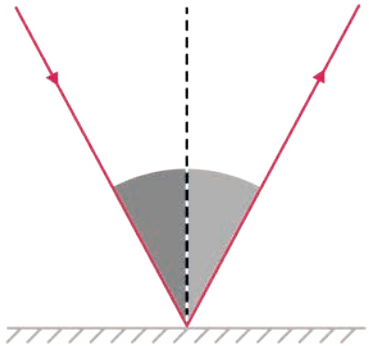
Light can change direction when it reaches a different material. **Reflection** is when light does not pass through a material and changes direction.



Shiny surfaces **reflect** light **uniformly**, whereas rough surfaces **scatter** the light rays.

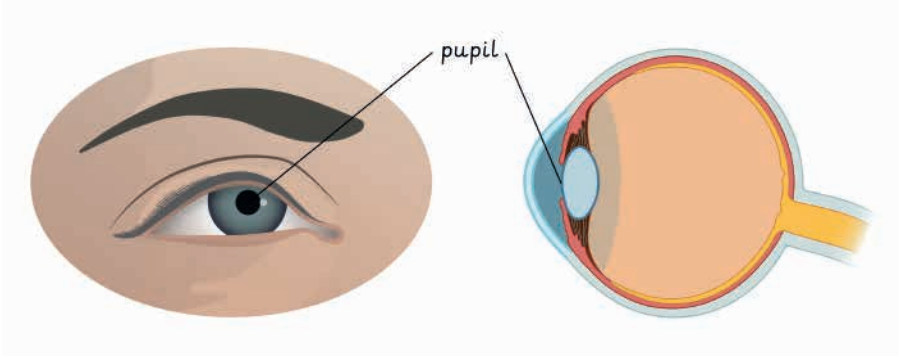


A **ray diagram** is a scientific drawing to show the pathway of light. It can be helpful to explain observations.



On a smooth surface, the angle of the **incoming ray** is the same as the angle of the **reflected ray.**

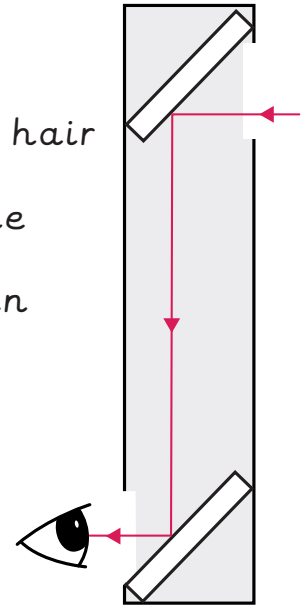
Light needs to enter the eye for us to see. It enters through the **pupil.**



Light may come directly from a **luminous** object or reflect off a **non-luminous** object.

Mirrors are useful in lots of situations:

- Looking at the back of your hair when you get it cut.
- Dentists looking at the inside of the mouth.
- Rear view and side mirrors in a car to look at your surroundings in a vehicle.



Periscopes are long, vertical tubes that contain a set of mirrors to give a view above the position of the eye.