

# Year 6 Curriculum HT5



**PSHE**  
Relationships


**E-safety**  
Managing online content

**Commando Joe**  
Know why trust is important in a friendship  
Use care and creativity to express concern for environments  
Know how to be courageous  
Know how to support others

**Personal Development**  
**Wider Curriculum Clubs Available**  
sports, yoga, choir, football, netball, music, art, drama, cooking, french, computing, sewing and dodgeball

**Trips and Visits**  
Cheadle Mosque  
Tuesday 21st 6RG  
Thursday 23rd 6R

**No Outsiders**  
To consider how life may change as I grow up



## English

### Inspirational Texts



Weeks 1-3    Weeks 4-6

### Class Readers



#### Genres for writing:

- Diary
- Letter
- Argument/discussion
- Narrative
- Explanation
- Non-chronological report

Within writing, Year 6 will be applying all of their knowledge and skills into writing pieces which demonstrate the national standards, as detailed in the KS2 writing framework

### Poetry

Year 6 will study and learn 'If' by Rudyard Kipling

## Maths

- To add and subtract:  
To multiple and divide:
- Algebra:**
- express missing numbers algebraically
  - find numbers which satisfy unknowns
  - use simple formulae
- Ratio and proportion:**
- solve problems involving unequal sharing and grouping
  - scale factors

Year 6 will be revising the KS2 curriculum in preparation for their statutory assessments

Within their STEM project, children will create a variety of graphs using collected data and utilise their knowledge of scales for accurate scale drawings

### Arithmetic

Children will have daily arithmetic practice where they retrieve and discuss efficient methods for calculating in all 4 operations, including with decimals and fractions

## Science

The Year 6 Science topic this half term is Electricity, and forms part of our STEM project.

Children will learn about electrical circuits, including how to accurately draw circuits and their components using the correct symbols.  
Children will also learn about voltage and current.



## DT

**Design Brief:** To design, make and evaluate an electronic guitar for a Year 2 child to play with.

Children will gather information from their target audience before designing their toy guitars. They will create scaled drawings, explore appropriate materials, and use a variety of saws to safely shape their product.



## RE

Does belief in Akhirah (life after death) help Muslims lead better lives?



## Computing

This half term children will be introduced to Micro: Bits. These are small computers which can be programmed and will form an integral part of our final STEM projects. The children will learn how to transfer the knowledge they have on block coding, inputs, outputs and variables, to program the Micro: Bits to perform specific tasks and even create games.



## PE

On Tuesdays, Year 6 will be continuing with cricket, taught by class teachers  
On Thursdays, a sports coach will be teaching Year 6 tennis.



## Spellings

Year 6 will be reviewing spelling rules from the KS2 curriculum

## Music

Miss Marsden will be teaching Music this half term.

The children will be learning how to play guitar. They will be able to name different parts of a guitar and learn a number of chords.



## French

Mrs Sunley will be teaching the Year 6 French lessons this half term. They will be learning:

- café culture
- the names of food and drink
- how to order food in a French café politely
- what a French breakfast consists of



# Knowledge Jigsaw

## Year 6 Computing HT5



### What we already know

Data can be letters, words, numbers, dates, images, sounds, etc.

A database is a collection of data that is stored in a computer and that can easily be used and added to.

Databases allow people to search and sort large quantities of data to find information. Data can be added or removed, edited, or viewed using the structure that was originally used to set up the database.

Computer programs can be used to compare data visually. It is important that you select the correct type of chart to help you to visually compare data

### These are all inputs on the micro:bit.



You can change the variable using these different inputs.

Variables must be reset before starting to run the program.

The accelerometer senses movement.

When you have more than one if...then...else... statements, you can combine them using a logic block.

### Online Safety – Managing Online Information

Online safety protects people from online harms when using devices and networks.

Information that is on a large number of sites may still be inaccurate or untrue. Just because something is popular, it doesn't mean it is true.

The micro:bit is a tiny computer.

You can write programs for the micro:bit on your computer and then transfer them to the micro:bit to be run.

The micro:bit programming environment is called 'Make Code' [makecode.microbit.org](http://makecode.microbit.org).

To write a new set of code, open the program then click on new project.

You can use the basic blocks to:

1. Display an image on the LEDs
2. Display a piece of text
3. Combine an image and text to make a sequence

Code needs to be placed inside a start block.

You can test your program using the emulator.

The micro:bit is connected to the computer using a USB cable.

To flash your program to the micro:bit you need to:

1. Click on 'Download'
2. Locate the file in your 'Downloads' folder
3. Copy the file from the folder to the MICROBIT drive
4. Run the program on your micro:bit

The micro:bit will only run code which has been downloaded.

If you change the code in the editor, you need to download it again on to your micro:bit.

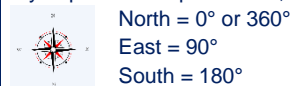
The buttons can be used to **input** an instruction to the micro:bit.

A **process** is carried out on the micro:bit.

The **output** can be displayed on the LEDs.

A compass uses a magnet to sense the magnetic North Pole.

If you point a compass north, you can see all the other directions.



West = 270°

You can use a compass to give a range for each direction:

You will need these blocks of code to make a compass.



### Online Safety – Managing Online Information

Online safety protects people from online harms when using devices and networks.

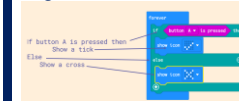
Inappropriate content is information, images or videos that upset you.

Not all inappropriate content is illegal.

If you anything that is inappropriate, you must tell a trusted adult or report it to child line.

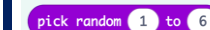
In programming, we represent decisions as if...then...else... statements.

E.g.



Instead of using buttons to control the flow of a program, you can use a variable.

In MakeCode you can generate random numbers using this block:



You can add more than one outcome by adding additional 'else' options. To do this click on the + button.

### Online Safety – Managing Online Information

Online safety protects people from online harms when using devices and networks.

Disinformation is information shared by people who don't realise it is false.

Disinformation is information that is shared with the intention to deceive.

When designing a project for the micro:bit, you need to consider the following:

1. What inputs are there?
2. When is a variable changed?
3. When is a variable displayed?
4. When is a condition used?

You can power the micro:bit away from the computer by attaching a AAA battery pack.

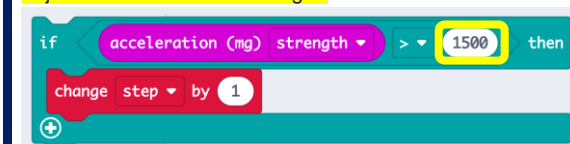
These are strategies you can use to debug your code:

Isolate code – take a small section of code out, and test only that section.

Substitute code – swap a section of code and test again.



You can adjust the sensitivity of the shake block. To do this you adjust the value for the strength.



# Knowledge Jigsaw

## Year 6 Science HT5



### What we already know

Electricity is a form of energy resulting from charged particles.

Electrical conductor – a material that allows electricity to pass through it

Electrical insulator – does not allow electricity to pass

In order for electricity to flow, a circuit needs: a source of electricity, no gaps in the circuit, conductors.

**Electricity** is a form of energy resulting from charged particles.

**Electrical conductor** – a material that allows electricity to pass through it e.g. copper, iron, steel, silver gold.

**Electrical insulator** – does not allow electricity to pass through e.g. rubber, wood, plastic, paper.

In order for electricity to flow, a circuit needs: a source of electricity, no gaps in the circuit, conductors.

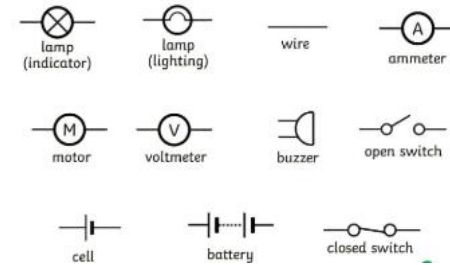
Wires, batteries, bulbs, buzzers and motors are electrical components that make up a circuit.

Outputs are achieved when there is a complete circuit.



**Circuit symbols** can be used to draw a simple series circuit including:

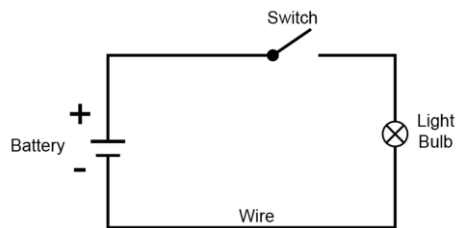
- Battery (cell)
- Wire
- Bulb Buzzer
- Motor
- Switch (on/off)



Circuits can be represented as diagrams using symbols for each component

Know how to draw a circuit diagram:

- Wires are drawn with a straight line using a ruler
- Circuit diagrams are drawn as a birds-eye-view
- Circuit diagrams are drawn rectangular
- Components of the circuit must touch the wire lines to show the circuit has no breaks



A **cell** is a device containing electrodes that is used for generating current.

A **battery** is a collection of cells. It stores energy until it is needed.

**Voltage** is the force that makes the electric current move through the wires. The greater the voltage, the more current will flow.

Mains electricity has a voltage of 210-240 volts. A typical cell in school has 1.5 volts.

**Current** is a flow of electricity which results from the ordered, directional movement of electrically charged particles.

We measure the amount of electrical energy (voltage) in Volts. A volt metre is used to measure voltage.

To attach a voltmeter to a circuit, use wires that touch the circuit. Do not touch the metal parts of wires- use the plastic coating to manoeuvre.

The brightness of a bulb is associated with the voltage.

More batteries (or a higher voltage) creates more power to flow through the circuit a bulb would therefore be brighter.

More buzzers/bulbs in a circuit means that power is shared by more components in the circuit. Increasing the number of buzzers/bulbs/motors would therefore decrease the power in each (the bulbs would be dimmer).

A line graph is a graph that is used to display change over time. A series of data points are connected by a straight line.

**Switch** – an electrical component that can make/break an electrical circuit. When a switch is open there is a gap in the circuit and electricity cannot flow around the circuit.



A light meter can be used to measure the brightness of a bulb. The brightness of a bulb is measure in amps.



Our Discovery Question:

**Does belief in Akhirah (life after death) help Muslims lead better lives?**

Knowledge

Akhirah is the Muslim belief in life after death.

Muslims try to live good lives that show love and respect to Allah. Muslims believe that when they die there is a judgment day. Allah, will weigh up the good things they have done against the not so good to decide whether they go to heaven after they die and which tier/part of Heaven they are allowed to go to.

Jihad is defined as a Muslims' personal struggle against evil.

For some it is an individual daily struggle to do the right thing, to avoid evil and temptation.

For other Muslims jihad can be taken to mean literally fighting against a perceived enemy or evil. This has led some Muslims to take extreme action. The Qur'an makes it clear that Muslims may fight in self-defence but must not start a fight or a war. There are strict rules about when fighting maybe considered as a Jihad.

Personal Reflection

I can reflect on what / which issues I think are important in life.

I can explore the question: How far would you go to stand up for something you believe in?

I can express my feeling on which ways of protesting are acceptable.



**What we already know**

- I have an accurate picture of who I am as a person in terms of my characteristics and personal qualities
- I understand that belonging to an online community can have positive and negative consequences
- I understand there are rights and responsibilities in an online community or social network
- I know there are rights and responsibilities when playing a game online
- I can recognise when I am spending too much time using devices (screen time)



**What is Mental Health?**

- **Mental Health is a person's condition with regard to their psychological and emotional well-being.**
- When we hear the term mental health it refers to our balanced state of mental wellbeing and whether we are enjoying life, making the most of it, and managing to cope when things get difficult.
- When our mental health is in balance everything is OK.
- **Challenges, stress and anxiety are a NORMAL part of life and alone they don't signify a mental health problem.**

**My Mental Health**

- **It is important to take care of my mental health.** Ensuring a balanced state of mental wellbeing and continuing to enjoy life, making the most of it, and managing to cope when things get difficult.
- **It is normal to feel some anger, stress, anxiety and sadness at certain times in our lives, but it shouldn't be too much**
- Sometimes life does become unbalanced but understanding the importance of speaking to someone is important

**Love and Loss**

- **Grief means intense sorrow and emotion.**
- There are **4 stages of grief:**
  - **Stage 1: Denying Feelings of loss, numbness, pain, disbelief, shock**
  - **Stage 2: Fighting Feelings of anger, guilt, sadness, pain, despair**
  - **Stage 3: Overwhelmed Feelings of depression, sadness, hopelessness, misery**
  - **Stage 4: Accepting Coming to terms, still upset but able to move on**



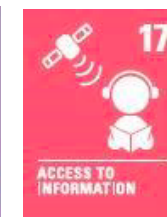
**Power and Control**

- When somebody is trying to gain power or control over someone else, they might not be doing it on purpose and might not realise they are doing it.
- In some cases, trying to gain power may be planned and deliberate.
- **It is important to stand up for myself and others, and that begins with making the person aware of what they are doing and how it is making us feel.**

**Being Online: Real or Fake? Safe or Unsafe?**

- **Pressure means the use of persuasion or intimidation to make someone do something**
- **Assertiveness means confident and forceful behaviour.**
- We have the right to be treated with respect and to be safe online, just as we would treat them in person.

**Rights of a child**





**What we already know**

Sport and hobbies and accessories  
The verbs avoir, jouer  
Adjectives  
Animals  
Numbers up to 60  
Toussaint, Poisson d'Avril  
Jean de la Fontaine  
Weather  
Some adjectival agreement  
Ask and answer questions about someone's identity  
Use adjectives to describe a planet  
Ice cream flavours and ordering  
Time and Daily routine  
Rooms and furniture in the house  
Piet Mondrian  
Prepositions  
Sports and adjectives to describe them  
Rides and treats at the funfair  
Explaining favourite things

**Café Culture**



In France the café culture is a big part of their lifestyle. People will go to a café for a drink and a bite to eat. They enjoy sitting outside and watching the world go by.

**Food at the café**



- Un croque-monsieur
- Un croque-madame
- Une portion de frites
- Un steak frites
- Une salade verte
- Un sandwich
- Une omelette
- Un croissant
- Une crêpe

**Drinks at the café**



- 1) Un coca
- 2) Une eau minérale
- 3) Un café
- 4) Un sirop de menthe
- 5) Un café crème
- 6) Un chocolat chaud

**Ordering Politely**

1. Good morning / good afternoon.	c. Bonjour/Bonne après-midi.
2. How are you?	e. Comment ça va?
3. I'm very well, thank you.	f. Ça va très bien, merci.
4. What would you like?	g. Vous désirez?
5. I'd like a sandwich and a coke, please.	d. Je voudrais un sandwich et un coca, s'il vous plaît.
6. Here it is! It's 10€ please.	a. Voilà! C'est 10euros s'il vous plaît.
7. Thanks!	h. Merci!
8. Good bye!	b. Au revoir!

Children will be able to have a conversation in role and take or place an order for food.

**French Breakfast**

A traditional French breakfast is coffee, croissant, bread and orange juice.



# Knowledge Jigsaw

## Year 6 Music HT5 - Guitar



### What we already know

We can identify orchestral instruments and which family they belong to (string, percussion, brass, woodwind).

We can follow notation understanding note and rest values, repeat signs, dynamics and tempo markings and 4/4 and 3/4 time signatures.

We can perform in solo and group contexts in time to a beat following a verse chorus structure.

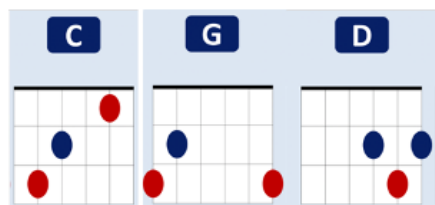
We can listen and appraise musical extracts and peer performances referring to the elements of music.

We can sing songs in a range of different styles and perform a round in 2 or more parts.

### Performing, Listening and Appraising

**Re-cap chords learned on the guitar** and perform *Land of a Thousand Dances* on chord D singing the melody and strumming on every beat of the bar.

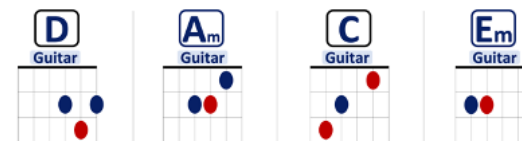
**Learn the full G chord** and perform an American folk song by Woody Guthrie on chords C, G and D.



### Performing, Listening and Appraising

Perform *ABC* using the full chords of G and C changing between chords accurately in every bar.

**Learn chord A minor** and Perform *Times Like These* by Foo Fighters using four chords.



### Performing

**Rehearse and perform a classic rock medley on chords G, C, D** as a whole class ensemble.

Strum in time to the beat singing the vocal melody and switching accurately between chords.



### Performing and Composing, Listening and Appraising

Listen and appraise a Taylor Swift song analysing the song lyrics to appreciate the role of a metaphor.

**Understand techniques for creating a song** and develop a greater understanding of the song-writing process.

Begin to **compose a year 6 leavers song, in groups, using a verse/chorus structure** and experimenting with pitch and rhythm to create a strong hook.

**Song Name:** \_\_\_\_\_

What is the song about?	Makes me feel:
Favorite lyrics:	Instruments used:
Draw the song:	

### Performing and Composing, Listening and Appraising

Rehearse and **further develop songs focusing on structure, interesting rhythms and hooks.**

**Perform and appraise each other's performances** commenting on lyrics, melody, hooks, structure and chord changes.



## Design brief

To design, make and evaluate an electronic guitar for a Year 2 child to play with.

### What I already know




The brief gives a Design Technology project a focus.

When cutting wood, you must always use an appropriate saw and do so under the guidance of a responsible adult.

When cutting wood you should always secure it to a level surface using a clamp.

Products are evaluated in questioning whether they are fit for purpose and if they are successful in meeting the brief.

### Key vocabulary, tools and equipment

CAD (noun)	Computer aided Design When a computer is used to design the product.
Scaled design (noun)	A drawing of an object, whereby the object is drawn smaller or larger than the item itself.
Coping saw (noun)	
Junior hacksaw (noun)	
Durable (adjective)	Able to withstand wear, pressure or damage.
G-Clamp and spreader clamp (noun)	
MDF (noun)	Medium density fibrewood A man-made wood which is free from natural defects.

### Design

A guitar is constructed of: body, neck and headstock. It also has a bridge, nut, sound hole, frets and strings

Designs need to be practical to construct and influenced by existing designs, but also appealing for their prospective user.

Tinker CAD is a design program, used by beginner designers/engineers.

Scaled designs, including sketches and CAD, are effective in envisaging the final product and an important part of the design process

### Make

Using different materials to create products give different outcomes. E.g. Plastic is lightweight but not always hard-wearing and has environmental implications whereas wood is a strong and durable material for construction.

Coping saws can be used to cut curved shapes in wood

Sanding and filing help achieve the shape and a smooth finish which also ensure the product is safe for use with no sharp edges.

Decorative products and materials should be used based on their aesthetics but also their safety, practicality and durability.

### Evaluate

To evaluate a product effectively, it should be trialed with/by the intended user (Reception children) and feedback gathered.

Designs are developed based on the strengths and development points identified by the product's intended user.



# Knowledge Jigsaw

## Year 6 Tennis HT5



### What we already know

A forehand strike is when you strike the ball from your dominant side.

It is important to develop placement of the ball using a forehand groundstroke.

It is important to develop placement of the ball using a backhand groundstroke.

A volley is used to return the ball quickly.

### **A forehand drive is an attacking shot.**

The forehand can be an aggressive and powerful attack shot that is used to return an opponent's shot and, when executed correctly, it will manoeuvre an opponent around the court or win a point.

By using a more aggressive shot your opponent will need to move more around the court which will make it more challenging for them.

### **The backhand drive is an attacking shot.**

The backhand can be an aggressive and powerful attack shot that is used to return an opponent's shot and, when executed correctly, will manoeuvre an opponent around the court or win a point.

By using a more aggressive shot your opponent will need to move more around the court which will make it more challenging for them.

**An underarm serve can be used to start a game of tennis**  
It is important to develop accuracy and consistency

### **Rules of serving**

**Ball must bounce over the net and before their partner's rubber marker (placed five steps from the net).**

**If the ball bounces out or does not go over the net, pupils have a second serve.**

**If the ball hits the net and bounces in, it is called a 'let' and they have their first serve again.**

**If a pupil fails to hit their serve 'in' after second serve, the point is awarded to their opponent. Pupils alternate serve after each point.**



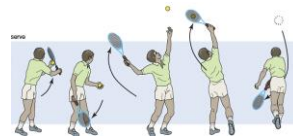
**An overarm serve can be used to start a game of tennis**

The overhead tennis serve is the shot selected to begin a point in tennis.

The shot involves tossing the ball overhead and hitting it when the ball is about to drop down.

The ball should cross the net and land in the diagonal service box, without hitting the net.

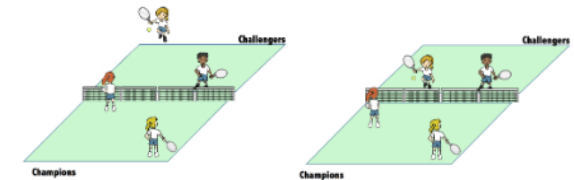
The serve must be hit from behind the baseline.



**When playing doubles, it is important to communicate with a partner.**

Depending where you are positioned on the court, you need to make different decisions.

Net players: try to win the point by volleying the ball.  
Baseline players: try to avoid the net player by playing the ball across the court.





What we already know

Close catching

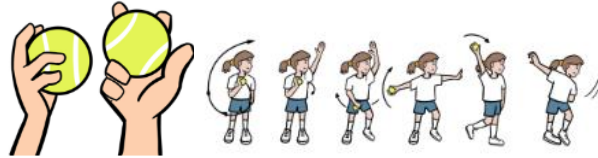
Deep catching

When batting, it is important to strike the ball into space and away from the fielders.

When catching, bring the ball into your body when catching to cushion the ball.

When throwing, step forward with the opposite foot to your throwing arm.

Over-arm bowling is used to bowl the ball  
Draw a number six with the ball when preparing to bowl.



Grip: hold the ball with two fingers and thumb.

Movement: draw a number 6 with bowling arm.

Step forward with opposite foot to bowling arm to help with balance.

Release with a straight arm, follow through with the same foot stepping forward for power.

When fielding, it is important to make a range of choices when throwing as an overarm or an underarm throw can be used.

Overarm – longer distances

Stance: feet shoulder width with opposite foot to throwing arm forward for balance. Throwing arm furthest away from target.

Action: keep the elbow of your throwing arm above your shoulder. Pull the ball through fast. Release the ball with hand finishing pointing towards your target, stepping forward in your follow through for power.



When fielding, it is important to make a range of choices when throwing as an overarm or an underarm throw can be used.

Underarm – shorter distances

Stance: feet shoulder width with opposite foot to throwing arm forward for balance. Throwing arm furthest away from target.

Action: keep the elbow of your throwing arm just above the waist and push forward. Pull the ball through fast. Release the ball with hand finishing pointing towards your target, stepping forward in

When fielding, it is important to remember to use a short barrier with a two handed pick up when collecting the ball.

If you are unable to stop the ball, you will have to chase it.

Use a two handed pick up when the ball is coming towards you.

Position your foot side on to the movement of the ball.



It is important to not slide along the ground when stopping the ball.

When fielding, you need to track the ball to make sure you are in line with it

Continue to develop the short and long barrier

Short barrier

Turn your foot sideways and place it behind the ball with your hand in front of your foot. If you misfield the ball, your foot should act as a barrier and stop it. Use two hands to pick up the ball.



Long Barrier

Track the ball, moving so that feet and body are behind the ball. Get low to the ground, side on to the ball with one knee touching the heel of the opposite foot creating a barrier.

