

# Year 9 Autumn 1



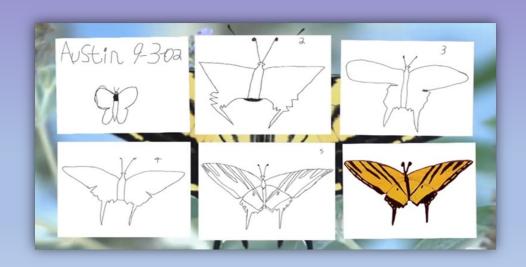






To become an **expert learner** you need to have the right mindset and understand the **'Power of YET'**!

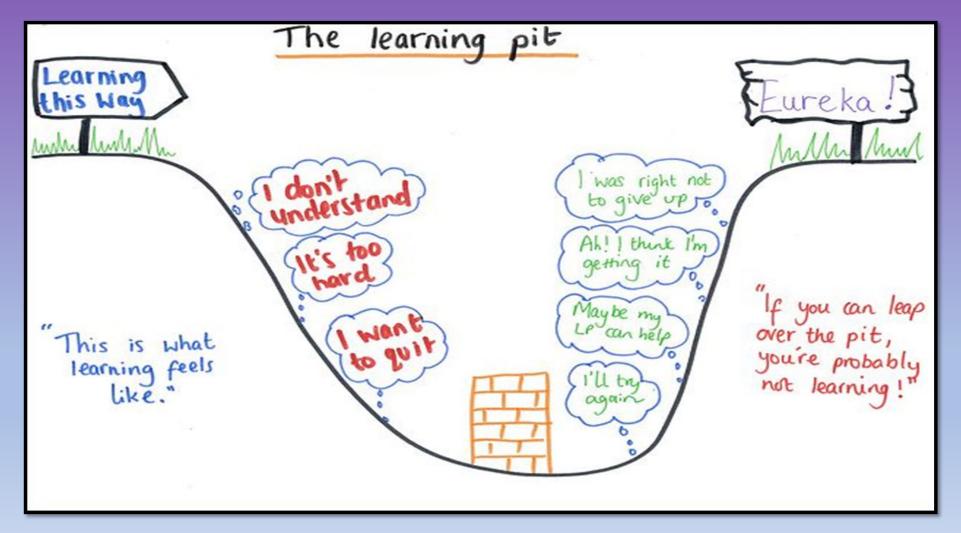
Check out Austin's butterfly picture below and learn how he seeks feedback to improve his work to achieve the most amazing results!







The Learning Pit is a picture to help you remember that you are constantly going to be challenged and confused when you learn something know, but it's about knowing what to do in order to overcome these challenges to get to the other side of the pit!





#### **Magnificant Metacognition**



#### Plan

Is this similar to a previous task? What do I want to achieve? What should I do first?

#### Monitor

Am I on the right track? What can i do differently? How can I ask for help?

#### **Evaluate**

What worked well?
What could I have done better?
Can I apply this to other situations?

2

#### **Marvellous Memory**



My memory and learning improves when I learn through spaced, retrieval, interleaved, elaborated, and use of concrete examples in practice.

I must use the best learning strategies above when using my 'Need to Know' to complete pre and post learning tasks.

During lessons I am a responsible Lead Learner, I teach my self and peers through mini tests, flashcards and look/cover/write/check/review, this help me and my peers learn quickly. 3

#### Love My Learning



I have a growth mindset and believe I can be as SMART as I want to be! My brain is a muscle and it will growth bigger with the amount of effort I put into practice.

I seek feedback and enjoy acting on it. I see 'EBI' and 'T' from my teachers / peers as opportunities to improve, by acting on feedback I experience success as a learne

I can be my own teacher and can articulate what I am learning and why. I know my mastery goals and I seek errors as opportunities. I aspire to challenges and have no fear of failure! 4

#### Literacy for Life



Every hour I read is an hour improving my writing. Time is worth investing in my books and Accelerated Reader.

I always check my grammar, spelling and punctuation, this will help me to achieve the highest SPAG marks in my GCSE exams.

Practicing my reading skills and literacy will improve choice in job/career prospects.

Success is when preparation makes opportunity and when practice makes permanent!



Subject: English Year: 9

Knowledge organiser Curriculum Topic: Journeys - Lang Paper 1 Writing

Concept: Creativity

#### I NEED TO KNOW:

How can I write a description inspired by a picture or write a short story?

#### **Assessment:**

You will have the choice of two tasks.

Write a description inspired by a picture or write a short story

Time: 45 minutes
Planning: 10 minutes

Writing: 30 minutes

**DIRT: 5 minutes** 

#### Remember to plan

- Include a checklist of skills
- List/brainstorm your ideas
- Number your ideas in the order you are going to write them

#### Checklist of skills:

- ✓ . . ; ' ? ""
- ✓ Varied sentences
- ✓ Impressive vocabulary
- ✓ Clear, linked paragraphs connectives
- Accurate spelling
- ✓ Techniques: similes, metaphors, choice of verbs, personification etc.



#### **Writing a Description**

- Box off 5 areas of the image (if appropriate to question).
- Each box will make up a paragraph.
- Number them in the order you are going to describe them.
- Describe in detail what you can:
  - o see
  - smell
  - hear
  - taste
  - touch

Use techniques: similes, metaphors, imagery, personification.

#### **Writing a Narrative**

- Focus on a single moment or short scene.
- Build tension.
- Think about the best way to start: description, action, dialogue.
- Have only 2 characters.
- Write in the past tense (was/were).
- Use a wide range of vocabulary – show off!
- Limit the amount of speech but include some.
- Vary your sentence beginnings and paragraph starters.



Subject: Maths

Knowledge organiser

Year: 9

Curriculum Topic: Fluency (A01)

**Useful websites:** 

mathsgenie.co.uk/gcse corbettmaths.com

mymaths.co.uk completemaths.com

I NEED TO KNOW: Accurately recall facts, terminology and definitions.

# **Algebraic Notation**

#### We group letters together

Means 3 lots of a

a + a + a

 $3 \times a$ 

b+bMeans 2 lots of b

 $2 \times b$ 

#### We use indices/powers

$$a \times a = a^2$$

(a squared)

 $b \times b \times b = b^3$ (b cubed)

# We do not use multiplication signs

$$3 \times a = 3a$$

$$6 \times b = 6b$$

$$a \times b = ab$$
$$a \times b \times c$$

= abc

$$\frac{a}{2}$$
 or  $\frac{1}{2}a$ 

# We write division using fractional notation

 $a \div 2$ 

Is written as

$$\frac{a}{2}$$
 or  $\frac{1}{2}a$ 

 $b \div 3$ 

Is written as

$$\frac{b}{3}$$
 or  $\frac{1}{3}$  b

To better understand the topic of algebra, it's essential to become familiar with a few key terms:

- Constant A value or number that never changes in an equation, e.g., 4 is a constant because it is a value that doesn't change.
- $\circ$  **Equation** A combination of terms or values that uses an equal sign to show a balanced relationship, e.g., 69ab=69is an equation.
- o Index- A small number written on the upper right-hand side of a number or variable, often referred to as an exponent or power. It can also be written as  $a^b$ , where b is the exponent, e.g., in the term  $5^2$ , 2 is the exponent.
- o Expression A combination of values and operations that can be used to show relationships and comparisons between elements, e.g., 80ef + 4q is an expression. Remember, expressions do not have an equal sign.
- Factor To consolidate two or more terms into a single term to perform further operations, e.g., 20a + 6b + 50c = 2(10a + 3b + 25c).
- o Operation An action performed on one or two numbers to produce a resulting number, e.g., multiplication, addition, subtraction, division, square root, and more.
- Simplify To combine all that can be combined by collecting like-terms, reducing the equation to its simplest form, e.g., 11a + 3a + 6a + 3b = 20a + 3b.
- **Solve** To work out or find the answer to a problem or equation.
- $\circ$  **Term** A combination of one or more factors, which can include numbers and/or variables, e.g., 5tu is a term, and the expression 5tu + 9 has 2 terms.
- $\circ$  Variable Often represented by letters that stand for unknown numbers, e.g., in the term 24t, t is the variable, as it is a value that does not have a fixed value.



**Subject**: SCIENCE **Year**: 9

#### **Knowledge Organiser Topics**: REQUIRED PRACTICALS

In your GCSEs you can be examined on a range of practicals. During this first half term, we complete a selection of these – focusing on a key skill with each one.

# SCIENTIFIC SKILLS I NEED TO KNOW:

- 1) The different stages in a scientific investigation
- 2) A range of scientific skills

| POSSIBLE PRACTICAL        | SKILL FOCUS           | <u>LINK</u>                                           |  |
|---------------------------|-----------------------|-------------------------------------------------------|--|
| Microscopy                | Maths and Planning    | https://shorturl.at/lrxJX                             |  |
| Photosynthesis            | Analysis & Evaluation | https://shorturl.at/abxHY & https://shorturl.at/fCGO2 |  |
| Osmosis                   | Trends and Patterns   | https://shorturl.at/KQY39                             |  |
| Temperature<br>Changes    | Planning and Justify  | https://shorturl.at/cesN2                             |  |
| Rate of Reaction          | Accuracy & Models     | https://shorturl.at/qtM58                             |  |
| Hooke's Law               | Processing Data       | https://shorturl.at/KQY39                             |  |
| Specific Heat<br>Capacity | Methods               | https://shorturl.at/qvwFW                             |  |

| Independent<br>variable | The variable you change in an investigation                                |  |
|-------------------------|----------------------------------------------------------------------------|--|
| Dependent<br>variable   | The variable you measure in an investigation                               |  |
| Control<br>Variable     | The variables kept constant in an investigation                            |  |
| Accurate                | Data that is close to the true value                                       |  |
| Precise                 | Set of repeat measurements that are close together                         |  |
| Reproducible            | Other people can carry out an investigation and get similar results        |  |
| Analyse                 | A process of looking at data and writing about what you have found out     |  |
| Line of best fit        | Smooth line on a graph that travels as close to as many points as possible |  |
| Conclusion              | What you have found out in an investigation                                |  |

**SUBJECT:** 

**TOPIC:** 

**Computer Science** 

**Python Programming** 



I NEED TO Know:

How to code basic computer programs using simple input and output using Python programming language

# To practice coding visit www.repl.it

| 1 | Algorithm               | A sequence of steps used by a human or computer to solve a problem or complete a task                                          |
|---|-------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 2 | Program                 | An algorithm expressed in a programming language                                                                               |
| 3 | Programming language    | A set of rules for instructing a computer to perform specific tasks                                                            |
| 4 | Interpreter             | A program which translates high level language code to machine code and executes it                                            |
| 5 | Programming environment | The tools a human uses to create programs                                                                                      |
| 6 | Input                   | Any method of getting data into the computer                                                                                   |
| 7 | Output                  | Any method of getting data out of the computer                                                                                 |
| 8 | Variable                | A storage location with a name. The data in a variable can be changed after being initially set                                |
| 9 | Assignment              | A statement in a programming language used to set or reset the data stored in a storage location identified by a variable name |

# Your first program in Python....

print("Hello world")

#### Output

The **print** function is used to write output to the screen. print takes one or more arguments (strings or variables between the brackets) and writes the data to the screen.

#### Output Examples

```
print("Hello World!")
print("Hello", name, "nice to meet you")
```

#### Variable Assignment

Variable assignments **are not** equations. Variable assignments are instructions for the computer. This means that the data stored in a variable can change throughout the runtime of the program.

YEAR:

#### Assignment examples

```
# Example 1
name = "Bob"

# Example 2
friendName = "Alice"

# Example 3
total = 20 + 50 + 35
```

#### Input

The input function is used to prompt the user to enter some data using the keyboard. input can take a string argument which is used as a prompt to the user to tell them what data the computer is expecting.

#### Type Casting

When inputting a number, the int function can be used to convert the number to an integer so that your program can perform mathematical operations on it. This is a form of type casting. Look at **Example 2** below to see this being done.

#### Input Examples

```
# Example 1
name = input("What is your name?")
# Example 2
age = int(input("What is your age?"))
```



A long, narrow mark or band.

of a text, concept, or process.

which other forms are developed

The visible shape or configuration of something.

A decoration, interpretation, or visual explanation

A first or preliminary version of a product from

The way in which all the elements of an image work

Being drawn in a way that is not natural or

How a 3D shape would look if it was unfolded.

together to produce an overall effect.

Name of a specific collection of related fonts.

**Corrugated Cardboard** 

**DEFINITION** 

realistic.

**KEY WORD** 

Line

Form

Typeface

Prototype

Stylisation

Composition

Net

Illustration

KNOW:

**SUBJECT: Graphics** 

**TOPIC:** 

Signage of my local village or town

YEAR:

Watercolour felt pens

I NEED TO How to create a road sign to promote my local village/town. How to make this illustrated image appear 3D. How to create a laser cut post on which to display the sign.

| STOCK |
|-------|
|       |
| S CO  |

| MATERIALS                | DEFINITION                                                                                            |
|--------------------------|-------------------------------------------------------------------------------------------------------|
| A3 paper                 | 420mm wide × 297mm high if landscape.                                                                 |
| Corrugated cardboard     | Cardboard that features a unique, corrugated construction for strength and impact resistance.         |
| Blendable felt tip pens  | Pens that can be applied to paper or card, then water added with a paintbrush to use as watercolours. |
| Glue stick               | Glue used for sticking paper and card to each other.                                                  |
| Coloured pencils         | Wax- or oil-based containing varying proportions of pigments, additives and binding agents.           |
| Double-sided sticky tape | Tape with adhesive on both sides.                                                                     |

| TERM                  | MEANING                                                                                           |
|-----------------------|---------------------------------------------------------------------------------------------------|
| Graphic Communication | Designing visual material to convey information, ideas, meaning & emotion in response to a brief. |
| Target Audience       | Specific group of consumers most likely to want your product or service.                          |
| Component Part        | A small part that can be considered separately from the whole. Unit.                              |

| TOOLS              | DEFINITION                                                                                       |
|--------------------|--------------------------------------------------------------------------------------------------|
| Craft knife        | Used to cut & score thin sheet material                                                          |
| Cutting mat        | Self-healing rubber mat for use with sharp blade used to cut sheet material accurately & safely. |
| Light box          | An illuminated flat workspace used to trace images or patterns from one source to another.       |
| Laser cutter       | CAM machines use a laser beam to cut through materials to create designs                         |
| 2D Design Software | School-based design programme enabling students to create artefacts on a range of CAM machines   |



**Light box** 



# Subject: Fashion & Textiles Year : 9

Knowledge organiser Curriculum Topic: Skills

#### I NEED TO KNOW:



#### Henri Matisse

In the late 1940s, Henri Matisse turned almost exclusively to cut paper as his primary medium, and scissors as his chief implement, introducing a radically new operation that came to be called a cut-out.

Matisse would cut painted sheets into forms of varying shapes and sizes—from the vegetal to the abstract—which he then arranged into lively compositions, striking for their play with colour and contrast and their exploitation of decorative strategies.

Initially, these compositions were of modest size but, over time, their scale grew along with Matisse's ambitions for them, expanding into

#### Different techniques used within Fashion & Textiles



#### **Mono Printing**

Monoprinting is a printmaking technique that produces unique prints. Unlike traditional printmaking methods where multiple identical copies are made, monoprints are one-off prints. Each print is distinct and cannot be precisely replicated.

Monoprinting allows for a wide range of artistic expression and experimentation. Artists can explore various materials, textures, and techniques to create different effects. It offers flexibility in combining printmaking, painting, drawing, and mixed media approaches.

Monoprinting can be done by handprinting or using a printmaking press.



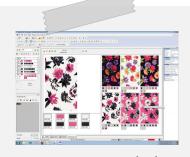
#### **Transfer Printing**

Transfer dye is a type of 'sublimation ink' which can be painted on to paper and then transferred to fabric using heat.

The inks/dyes that are used turn into gas when brought under heat, then combine with the fabric and permanently print onto the fabric.

The effects are permanent and less prone to fading, as the ink is embedded in the fabric or substrate rather than simply laying on top like a normal print.

The heat opens up the pores of the fabric, then with the applied pressure the ink cools and returns to a solid form.



# Computer Aided Design

#### Positives:

- Save time and money
- Allow designers to be more creative because there is more variety
- Designers can have pre-made designs and adapt them easily – save time instead of re drawing them by hand
- Experimental work can be done digitally, saving time and money
- Designers can send their designs to other designers quickly by email – globally.

#### Negatives:

- Training is required to use all the features of a software
- All designers have to have compatible software when sending and receiving designs



Subject: Food Year : 9

Knowledge organiser Curriculum Topic: Science of cooking

food

# I NEED TO KNOW:

Why and how we cook food. The importance of different nutrients

Why do we cook food?

- To kill pathogenic bacteria
- To soften food
- To make food more digestible
- To improve flavour
- To make it look more appealing
- To enable certain ingredients to work together
- To keep warm in colder weather

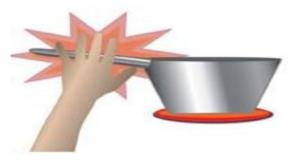
Conduction

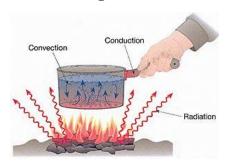


Radiation

Heat transfer through

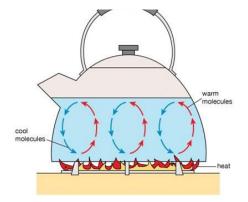
Heat is transferred through directradiation takes place in form contact with a substance. of electromagnetic waves.





#### Convection

Convection refers to a method of heat transfer where food is heated by a moving heat source such as hot air inside an oven that is circulated by a fan.



# Micronutrients (y9 need to know)



#### Vitamins Minerals Minerals

A range of minerals are required by our bodies on a regular basis.

Minerals help our bodies to grow and

keep our metabolism going. Calcium

Iron helps improve the transport of oxygen in

blood around

Helps keep our bones and teeth strong.

lodine Helps regulate our bodies temperature.

# **Vitamins**

Water Soluble: Not stored in the body and must be eaten in the daily diet (vits B and C).

Fat Soluble: Stored in our bodies fat and can serve

| us for several months (vi | ts: Acks Deand: Ei)n healthy and helps maintain good eyesight. |
|---------------------------|----------------------------------------------------------------|
| Vitamin K                 | Needed for clotting blood.                                     |
| Vitamin D                 | Keeps bones and teeth strong.                                  |
| Vitamin B12               | Formation of new red blood cells.                              |
| Vitamin C                 | Protects against diseases.                                     |



Subject: Art Year : 9

Knowledge organiser Curriculum Topic: Fish and 3D

#### I NEED TO KNOW:

Use this sheet to prepare for each lesson and understand the key terminology that you will be learning throughout this topic beforehand. It is recommended that you prepare yourself for each lesson by looking over the information below and develop your skills beforehand so you're prepared. You can also read about the inspirations and influences for this topic to get more information. The project will develop your skills in the 4 assessment objective areas – research, observe, experiment and present.

# **CONCEPT OR DIAGRAM**

| Artists          | BASIC INFO                                                                                                                                                                                                                            |  |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| DEREK YOUNG      | American contemporary fish painter working in acrylic . Using bold patterns and bright colours                                                                                                                                        |  |
| Lea Nahon        | Contemporary tattoo artist . Focussing on line and mark making                                                                                                                                                                        |  |
| Claudia Hocking  | Cornish fish artist working in mix media – painting and sculpture work                                                                                                                                                                |  |
| KEY WORD/CONCEPT | DEFINITION                                                                                                                                                                                                                            |  |
| Layer            | letting one application of paint or material dry before adding another on top of it                                                                                                                                                   |  |
| Bas-relief       | A bas-relief is a sculpture carved on a surface so that it stands out from the background.                                                                                                                                            |  |
| Transcribe       | In art, to transcribe is to copy or record information in a different form than the original. To transcribe a painting or drawing is not to copy the artwork exactly, but instead to record observations in a different form.         |  |
| collage          | Collage describes both the technique and the resulting work of art in which pieces of paper, photographs, fabric and other ephemera are arranged and stuck down onto a supporting surface                                             |  |
| Technique        | the manner and ability with which an artist, writer, dancer, athlete, or the like employs the technical skills of a particular art or field of endeavor. 2. the body of specialized procedures and methods used in any specific field |  |
| Depiction        | Depiction is reference conveyed through pictures- an image that expresses that word or meaning                                                                                                                                        |  |

| Week | Preparation and helpful links                                                                                                                                 |  |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1    | https://www.derekdeyoung.com/about-derek/dereks-art watch a video about the artist                                                                            |  |
| 2    | research fish artists in a range of medias and styles                                                                                                         |  |
| 3    | http://www.leanahon.com/flashs/sea1/ explore the work of Lea Nahon . Try to draw a jelly fish in biro focussing on mark making skills similar to the artist=t |  |
| 6    | https://claudiahocking.co.uk/ visit the artist website and watch a video of her working                                                                       |  |
| 7    | https://www.youtube.com/watch?v=JJzLmh-QrPs practice drawing fish – follow the step by step video and try to include shading                                  |  |



Subject: Dance

Knowledge Organiser Curriculum Topic:

Technique and create

Year: 9

I NEED TO KNOW:

Exploring other ways of creative movement material other than

| WEEK<br>1 & 2 | Technique  Explore the stylistic features of contemporary technique and learn where it originates from. Spend time exploring both the Technical and Expressive skills and track how we progress throughout the term                                                                                                                                |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WEEK<br>3 & 4 | Creating You will be lead through a variety of choreographic tasks to develop and amend set movement material and to slowly start to build a whole class piece. This experience will provide you with an opportunity to see how a large group ensemble piece comes together whilst learning to work with a variety of people in different formats. |
| WEEK 5 & 6    | Polish and Perform  Polishing the whole class piece and performing it to a small audience, where you will be able to reflect on how far you have you have come as a dancer, performer and choreographer.                                                                                                                                           |

| KEY WORD/CONCEPT            | DEFINITION/EXPLANATION                                                                                           |
|-----------------------------|------------------------------------------------------------------------------------------------------------------|
| Technical rehearsal         | Rehearsal where music, lighting, set                                                                             |
| Dress rehearsal             | A rehearsal where costumes are used to ensure they are suitable for the character and overall feel of the dance. |
| Start stop rewind rehearsal | Perform a short section of the dance,<br>rewind it, receive feedback, amend,<br>perform again with adjustments.  |
| Audience in the round       | The audience are sat around the dancer                                                                           |
| Motif                       | A short section of a dance that can be repeated                                                                  |
| Choreographer               | Someone that creates a dance                                                                                     |

# **KEY CONCEPTS**

- Technique
- Choreographic



**SUBJECT:** 

Music

YEAR:

9

Knowledge organiser topic:

**MUSIC FOUNDATIONS** 

An introduction to music through discovery of rhythm, pulse and pitch

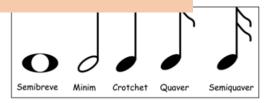
Your first topic is TV, Adverts and Games MUSIC alongside the weekly checks on pulse, pitch and rhythm

# KEYWORDS INEED TO KNOW:

| Duration  | How long a note lasts for                                            |
|-----------|----------------------------------------------------------------------|
| Pitch     | How high or low a note is                                            |
| Tempo     | How fast or slow a note is                                           |
| Dynamics  | How loud or quiet the music is                                       |
| Timbre    | The quality of sound                                                 |
| Texture   | How thick or thin the music is                                       |
| Structure | How the sections of music<br>are laid out e.g. chorus, verse<br>etc. |
| Silence   | When the instruments stop playing                                    |

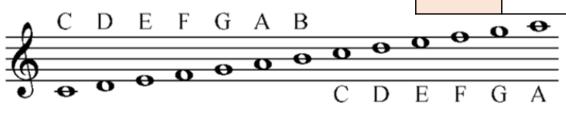
|                           | WEEK<br>1 & 2 | Base level assessment What do you listen to? How does music make you feel? What instruments can you play? Discover Pulse Through listening tasks, tap, clap the pulse of a played piece of music     |
|---------------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| patterns to perform in si |               | Rhythms Develop knowledge of various and construct own rhythm patterns to perform in small groups. Body percussion tasks.  Try this at home for practice https://www.youtube.com/watch?v=SGp3EHmGLH8 |
|                           | WEEK<br>5 & 6 | Pitch Increase your knowledge of the pitch and placement of notes when written on a STAFF. A staff are the 5 lines and spaces that we write music on. Compose on melody (tune)                       |





# NOTE AND REST DURATION CHART

| NOTES (SOUND DNG) | THE AND VALUE           | RESIS (SDLENT) |
|-------------------|-------------------------|----------------|
| 0                 | Whole<br>(4 Beats)      | -              |
| 0                 | Half<br>(2 Beats)       | _              |
|                   | Quarter<br>(I Beat)     | ż              |
| <b>\</b>          | Eighth<br>(1/2 Beat)    | 7              |
|                   | Sixteenth<br>(1/4 Beat) | 7              |



Concepts:

Listening- Creating-Performing



Subject: PE Year: 9

Knowledge organiser Curriculum Topic: Learning to Lead

Techniques and fluency

and healthy Lifestyles

#### I NEED TO KNOW:

By the end of this term, you will develop an understanding of strategies and tactics, and how positive attitudes can improve performance and wellbeing.

| Effective Tea                               | ms and sportsmanship |                             |
|---------------------------------------------|----------------------|-----------------------------|
| Through<br>netball<br>rugby and<br>handball | Develop leadership   | skills                      |
|                                             | Communication        | Speaking to others          |
| Leadership                                  | Communication        | Listening to others         |
| skills                                      | Demonstrating        | Showing skills to the class |
|                                             | Planning             | A skill/practice            |

| Effective teams and sportsmanship                                                             |                                     |
|-----------------------------------------------------------------------------------------------|-------------------------------------|
| Through<br>netball<br>rugby and<br>handball                                                   | Understand what makes a good leader |
| Organised, good planning, safety aware, good voice, understand rules and tactics, motivating, |                                     |

| Through<br>Volleyball | Able to link fundamental skills |                   |
|-----------------------|---------------------------------|-------------------|
|                       | Volley                          | Using finger tips |
| Understand            | Service                         | Under and         |
|                       |                                 | overarm           |
| Universiand           | Dig                             | Correct hand      |
|                       |                                 | placement         |
|                       | Spike                           | Hitting the ball  |
|                       | эріке                           | downwards         |

|                  | Fit For Life           |                                 |
|------------------|------------------------|---------------------------------|
| Training         | How to improve fitness |                                 |
| Circuit training |                        | Plan and carry out own circuits |
| Methods<br>of    | Weight training        | Understand sets and reps        |
| Training         | Interval<br>Training   | Sprints and rest/recovery       |
|                  | Continuous<br>training | Working for a long time         |

| Fit for life                               |                        |                      |
|--------------------------------------------|------------------------|----------------------|
| Heart<br>Rates                             | Thresholds of training |                      |
| Resting Heart How and when Rate to take it |                        |                      |
| Training<br>Zones                          | Maximum<br>heart rate  | 220- age + MHR       |
|                                            | Aerobic                | 60 – 80% MHR         |
|                                            | Anaerobic              | 80% and above of MHR |

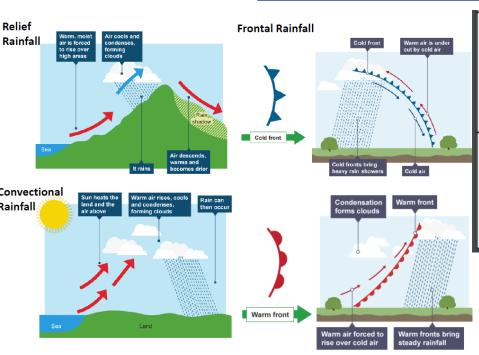
| Fit for life            |                             |                                           |
|-------------------------|-----------------------------|-------------------------------------------|
| Muscles                 | Locate the skeletal muscles |                                           |
|                         | Arm muscles                 | Biceps Triceps                            |
| Muscles for movement in | Leg muscles                 | Hamstrings<br>quadriceps<br>gastrocnemius |
| sport                   | Back muscles                | Trapezius<br>Latissimus dorsi             |
|                         | Stomach<br>muscle           | Abdominals                                |



Subject: Geography Year:

Knowledge organiser Curriculum Topic: Dangerous Weather

#### I NEED TO KNOW:



Hurricanes need a lot of heat to form and a sea surface temperature of at least 26°C, which is why they usually occur over tropical seas. They also need to be between 5 and 20° north or south of the Equator.

#### LOW PRESSURE is caused when...

Common weather is...

Where does it occur?

#### HIGH PRESSURE IS

Where does it occur?

Warm air rises. When the air rises, there are less molecules in the lower atmosphere = low pressure.

Clouds, rain and winds. As the warm air rises, it cools and condenses and forms clouds. Eventually the clouds become saturated (full of water) & rain. Strong winds are common.

The equator - the sun's energy is concentrated over a smaller area. The average temperature is 26°C. The warm air rises, cools, condenses to form clouds = precipitation There is a lot of rain at the equator. This is where you find tropical rainforests.

caused when...

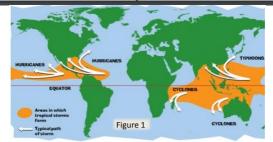
Common weather is...

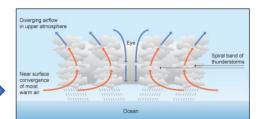
Cooler air sinks. When air sinks, there are more molecules in the lower atmosphere = high pressure.

Sinking air = no water vapour condenses = clear skies, dry conditions

- Summer: hot days, no clouds, dry, droughts.
- Winter: cold days, frost and ice common.

Air sinks at 30° N&S of the equator and at 90° N&S of the equator. This is where we find hot and cold deserts.





#### Weather forecasts:

Meteorology is the scientific study of the atmosphere. Most countries have a central organisation responsible for weather forecasting. Data is collected over millions of weather stations. They use a variety of methods to collect data, including satellites, aeroplanes, radars, ships and ocean buoys. This data is sent to supercomputers which process the data, which meteorologists then use to create charts and forecasts.

- In Scotland there is heavy rain with temperatures between 9-11°C. Winds are from the south. The maximum wind speed is 26
- In England there is cloud in the north and sunshine in the southeast, with some rain in the southwest. Temperatures range between 6-9°C. Wind speeds are as low as 3 mph an from the
- In Northern Ireland there is heavy rain and temperatures of 12°C, with 20 mph winds from the south west.
- In Wales there is cloud and heavy rain with winds of up to 17 mph from the south.



Low pressure

Anticyclone



Subject: History

Knowledge organiser Curriculum Topic: World war 1

#### To understand the MAIN reasons for the start of WW1

#### Y9 History Knowledge Organiser: Unit 3- World War One 1914-1918

| ı | Key words:       |                                                                                     |
|---|------------------|-------------------------------------------------------------------------------------|
| ı | World War One    | A global conflict involving the main European Powers and their empires from August  |
| ı |                  | 1914 to November 1918.                                                              |
| ı | Long term cause  | Factors / causes which happen a long time before an event takes place.              |
| ı | Short term cause | Factors / causes which happen just before an event takes place – usually a catalyst |
| ı | Militarism       | An emphasis on military ideals and strength. Wanting your country to have a strong  |
| ı |                  | army and navy.                                                                      |
| ı | Alliances        | A group of counties who promise to support and protect each other. Rival groups     |
| ı |                  | have rival alliances.                                                               |
| ı | Imperialism      | The desire to conquer colonies, especially in Africa. This brought the powers into  |
| ı |                  | conflict: Germany wanted an empire. France and Britain already had empires.         |
| ı | Nationalism      | The belief that your country is better than others. This made nations assertive and |
| ı |                  | aggressive                                                                          |

Long term causes of WW1: Militarism, Alliances, Imperialism, Nationalism

#### European countries Empires in 1914.

|               | Population of country | Population of colonies | Area in km2 of colonies |
|---------------|-----------------------|------------------------|-------------------------|
| Great Britain | 40.8 million          | 390 million            | 27 million              |
| France        | 39.6 million          | 63 million             | 11 million              |
| Germany       | 63 million            | 1.5 million            | 2.5 million             |
| Austria       | 50 million            | none                   | none                    |
| Russin        | 139 million           | none                   | none                    |

| European Milita | European Military spending and the size of their armies, 1913 - 14. |                          |  |
|-----------------|---------------------------------------------------------------------|--------------------------|--|
| Country         | Soldiers                                                            | Money spent in millions. |  |
| Britain         | 750,000                                                             | 50,000,000               |  |
| France          | 1,500,000                                                           | 40,000,000               |  |
| Germany         | 8,250,000                                                           | 60,000,000               |  |
| Austria         | 750,000                                                             | 22,500,000               |  |
| Russia          | 1,250,000                                                           | 15,500,000               |  |
| Italy           | 750,000                                                             | 10,000,000               |  |
|                 |                                                                     |                          |  |

#### What were the Great Powers concerned about in 1914?

- · Britain: Germany's growing military and naval strength. Germany was also producing more goods.
- Germany: Jealousy of Britain. Fear of having hostile neighbours (France and Russia).
- Russia: Rivalry with Austria-Hungary, Russia was keen to increase its influence in the Balkans.
- Austria Hungary: Many regions in the Empire wanted their independence. Russia was prepared to support these regions. Huge rivalry with Russia.
- Italy: To try and remain neutral in the event of a major European war.
- · France: Wanted revenge after losing an earlier war to Germany and losing the territory of Alsace-Loraine

#### Alliances

For a number of years tension between the main European powers has been increasing. In 1914 there were two main power blocks / alliances:

- . The Triple Entente- Great Britain / France / Russia
- The Triple Alliance- Germany / Italy and Austria-Hungary

Each member promised to help its allies if they were attacked by a country belonging to another alliance.



#### Short term consequences: Events of 28 June 1914 in Sarajevo:

#### Archduke Franz Ferdinand

- A member of the Austrian Royal Family nephew of Emperor Franz Josef
- Heir to the Austrian throne (next in line to be the Emperor / ruler of Austria-Hungary)
- Not very well liked in Austria
- Married to Sophie and had three Children
- Was sent on a Royal tour to Sarajevo, the capital of
- Bosnia a county which Austria has just taken over.
   Assassinated on June 28, 1914 by Gavrillo Princip

#### Gavrillo Princip

Year: 9

- Gavrilo Princip was born in Bosnia in 1894, the son of a postman.
- He became a member of the <u>Black Hand</u> a Serbian terrorist organisation which wanted to hurt Austria and get it out of Bosnia.
- Planned to assassinate Franz Ferdinand

#### Timeline of 1914 - events leading up to the start of WW1

June 28 - Archduke Franz Ferdinand, prince to the Austria-Hungary throne, is assassinated in Sarajevo by a Serbian named Gavrilo Princip.

July 23 - Austria-Hungary demands Serbia pay for the assassination of Franz Ferdinand. Serbia does not meet these demands.

July 28 - Austria-Hungary declares war on Serbia. Russia begins mobilizing its troops.

August 1 - Germany declares war on Russia.

August 3 - Germany declares war on France as part of the Schlieffen Plan.

August 4 - Germany invades Belgium. Britain declares war on Germany.

August 23 to 30 - The Battle of Tannenberg is fought between Germany and Russia. The Germans defeat the Russian Second Army.

September 5 to 12 - The advancing German army is stopped before Paris by the British and French at the First Battle of the Marne. The Germans dig in and four years of trench warfare begins.

#### What was the BEF?

On 3<sup>rd</sup> August 1914 war was declared. The British government send the British Expeditionary Force (BEF) led by General French to France to stop the German invasion. The 70,000 strong force quick arrived in northern France and met the Germans at the city of Mons in Belgium. The BEF were heavily outnumbered by 160,000 German troops. However, the British were well trained and were able to slow the advancing Germans.

#### What was the Schlieffen Plan?

- The plan was the work of the German army chief-of-staff Alfred von Schlieffen.
- It took nine years to devise it was started in 1897, presented in 1905, and revised in 1906.
- . It was a plan to win a war fighting against both France and Russia
- The plan imagined a huge hammer-blow at Paris, using 90 per cent of the German army, swinging down through Belgium and northern france, to take out france in a guick, decisive campaign.
- It was a plan of attack for Germany, mobilisation and war were the same thing.
- It was Germany's only plan for war.
- It failed because the Germans were slowed down by the French and British and they failed to capture Paris.



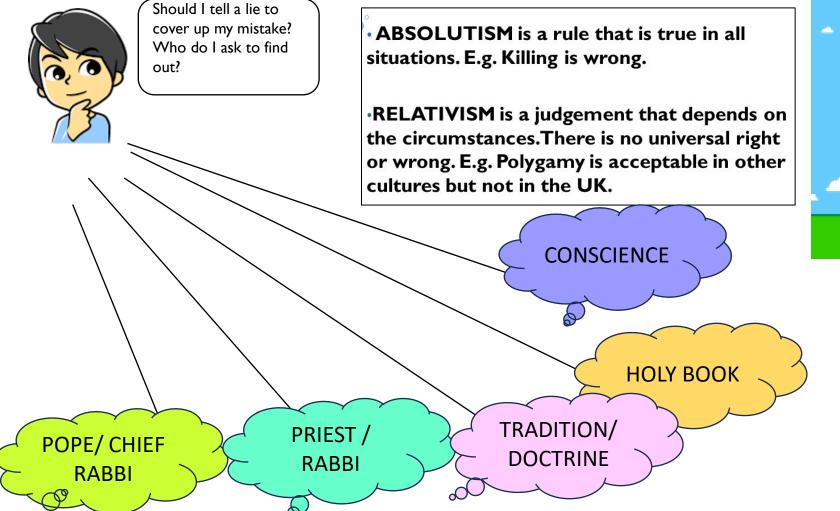
Subject: RELIGION AND WORLDVIEWS Year: 9

Knowledge organiser Curriculum Topic: Good/Bad/Right / Wrong: How do I

decide?

#### I NEED TO KNOW:

Rules can be absolutist or relativist; consequential or deontological





# CONSEQUENTIALISM VS DEONTOLOGICAL

Consequentlialism is a view that whatever is right or wrong depends on the consequences.

Deontological means that some actions are rightor wrong according to a set of rules.



SUBJECT: FRENCH YEAR: 9

TOPIC: Studio 3 Vert Module 1 Ma Vie Sociale d'Ado

#### I NEED TO KNOW:

How to describe yourself, invite someone out, Talk about social media, describe a date and a music event

| Tu es comment?     | What do you<br>look like? |
|--------------------|---------------------------|
| J'ai les cheveux   | I have hair               |
| blonds             | blond                     |
| noirs              | black                     |
| bruns              | brown                     |
| roux               | red                       |
| J'ai les yeux      | I have eyes               |
| blue               | bleus                     |
| marron             | brown                     |
| gris               | grey                      |
| verts              | green                     |
| Je suis beau/belle | I am good                 |
|                    | looking/beautiful         |

| Qu'est-ce que tu fais sur Facebook?            | What do you do on Facebook?    |  |
|------------------------------------------------|--------------------------------|--|
| Je poste des messages à mes copains.           | I post messages to my friends. |  |
| Je modifie mes préférences. I update my likes. |                                |  |
| Je regarde les photos de mes copains.          | I look at my friends' photos.  |  |
| Je commente des photos.                        | I comment on photos.           |  |
| J'invite mes copains à sortir.                 | I invite my friends out.       |  |
| Je fais des quiz.                              | I do quizzes                   |  |

| La fréquence                   | Frequency         |
|--------------------------------|-------------------|
| quelquefois                    | sometimes         |
| souvent                        | often             |
| tous les jours                 | every day         |
| tous les soirs                 | every evening     |
| tous les weekends              | every weekend     |
| une fois/deux fois par semaine | once/twice a week |
|                                |                   |

| Où vas-tu le weekend? | Where do you go at the weekend? |
|-----------------------|---------------------------------|
| Je vais               | I go                            |
| au centre commercial. | to the shopping centre.         |
| au centre de loisirs. | to the leisure centre.          |
| au cinéma.            | to the cinema.                  |
| au fastfood.          | to the fast-food restaurant.    |
| à la patinoire.       | to the ice rink.                |
| à la piscine.         | to the swimming pool.           |

| Mon caractère    | My personality |
|------------------|----------------|
| Je suis          | I am           |
| drôle            | funny          |
| gentil(le)       | kind           |
| intelligent(e)   | intelligent    |
| lunatique        | moody          |
| sportif/sportive | sporty         |
| timide           | shy            |

| Les mots essentiels | High-frequency<br>words |
|---------------------|-------------------------|
| oui                 | yes                     |
| non                 | no                      |
| j'ai                | I have                  |
| je suis             | I am                    |
| et                  | and                     |
| mais                | but                     |
| ou                  | or                      |
| aussi               | also                    |

| un peu    | a bit     |
|-----------|-----------|
| avec      | with      |
| qu'est-ce | what?     |
| que?      |           |
| pourquoi? | why?      |
| parce que | because   |
| ce/cet    | this      |
| merci     | thank you |



SUBJECT: FRENCH YEAR: 9

TOPIC: Studio 3 Vert Module 1 Ma Vie Sociale d'Ado

#### I NEED TO KNOW:

How to describe yourself, invite someone out, Talk about social media, describe a date and a music event

| Les invitations et les réactions | Invitations and reactions    |
|----------------------------------|------------------------------|
| Tu veux aller                    | Do you want to go            |
| au cinéma /à la piscine?         | to the cinema/swimming pool? |
| ce matin                         | this morning                 |
| cet après-midi                   | this afternoon               |
| ce soir                          | this evening                 |
| demain (matin)                   | tomorrow (morning)           |
| samedi (après-midi/soir)         | Saturday (afternoon/evening) |
| Oui, je veux bien.               | Yes, I'd like to.            |
| D'accord.                        | OK.                          |
| Génial!                          | Great!                       |
| Pourquoi pas?                    | Why not?                     |
| Non, merci.                      | No thanks.                   |
| Tu rigoles!                      | You're joking!               |
| J'ai horreur de ça!              | I hate that!                 |
| Désolé(e), je ne peux pas.       | Sorry, I can't.              |

| Qu'est-ce que tu as fait samedi? | What did you do on Saturday?  |
|----------------------------------|-------------------------------|
| J'ai dansé avec                  | I danced with                 |
| J'ai joué au bowling avec        | I went bowling with           |
| J'ai mangé un hamburger avec     | I ate a hamburger with        |
| I watched a DVD with             | J'ai regardé un DVD avec      |
| Je suis allé(e) au cinéma avec   | I went to the cinema with     |
| I went into town with            | Je suis allé(e) en ville avec |
| Je suis allé(e) à une fête avec  | I went to a party with        |
| C'était                          | It was                        |
| genial.                          | great.                        |
| romantique.                      | romantic.                     |
| sympa.                           | nice.                         |
| ennuyeux.                        | boring.                       |
| nul.                             | rubbish.                      |
| un désastre.                     | a disaster.                   |

| Au festival de musique                 | At the music festival                    |
|----------------------------------------|------------------------------------------|
| On a écouté toutes sortes de musiques. | We listened to all sorts of music.       |
| On a chanté.                           | We sang.                                 |
| On a dansé toute la soirée.            | We danced all night.                     |
| On a mangé de la pizza.                | We ate pizza.                            |
| On a regardé le concert surdes écrans  | We watched the concert on giant screens. |
| géants.                                |                                          |
| On a bien rigolé.                      | We had a good laugh.                     |

#### Stratégie 1

#### **Endings, not beginnings**

When you want to work out what a verb means, look at the end of the word as well as the beginning.

regarder to watch (the infinitive)

regarde watch/watching (present tense)

regardé watched (past participle)



SUBJECT: **Spanish** YEAR:

TOPIC: Viva 3 Verde Module 1 Somos Así

#### I NEED TO KNOW:

#### how to describe things you like, your week, films and birthday celebrations

| Opiniones                          | Opinions                              |
|------------------------------------|---------------------------------------|
| ¿Qué cosas te gustan?              | What things do you like?              |
| ¿Qué cosas te encantan/te chiflan? | What things do you love?              |
| ¿Qué cosas no te gustan (nada)?    | What things do you not like (at all)? |
| Me gusta(n) (mucho)                | I like (a lot).                       |
| Me encanta(n) / Me chifla(n)       | I love                                |
| No me gusta(n) (nada)              | I don't like (at all).                |
| el deporte                         | sport                                 |
| el dibujo                          | drawing                               |
| el fútbol                          | football                              |
| el racismo                         | racism                                |
| la música                          | music                                 |
| la tele                            | TV                                    |
| la violencia                       | violence                              |
| los animales                       | animals                               |
| los deberes                        | homework                              |
| los insectos                       | insects                               |
| los videojuegos video              | games                                 |
| las artes marciales                | martial arts                          |

| o me gusta(n) (nada)             | I don't like (at all).                  | Monto en bici.           |
|----------------------------------|-----------------------------------------|--------------------------|
| deporte                          | sport                                   | Saco fotos.              |
| dibujo                           | drawing                                 | Toco el teclado.         |
| fútbol                           | football                                | Veo un partido de fútbol |
| racismo                          | racism                                  |                          |
| música                           | music                                   | Expresiones de frecuen   |
| tele                             | TV                                      | una vez a la semana      |
| violencia                        | violence                                | dos veces a la semana    |
| s animales                       | animals                                 | a veces                  |
| s deberes                        | homework                                | a menudo                 |
| s insectos                       | insects                                 | siempre                  |
| s videojuegos video              | games                                   | (casi) todos los días    |
| s artes marciales                | martial arts                            | todos los fines de seman |
|                                  | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                          |
| n mi tiempo libre                | In my free time                         |                          |
| Sov miembro de un club (de judo) | Tam a member of a (juda) club           | 110                      |

| En mi tiempo libre                | In my free time                 |
|-----------------------------------|---------------------------------|
| Soy miembro de un club (de judo). | I am a member of a (judo) club. |
| Soy miembro de un equipo.         | I am a member of a team.        |
| Soy miembro de un grupo.          | I am a member of a group / band |

| ¿Cuándo?             | When?                   |
|----------------------|-------------------------|
| los lunes / martes / | on Mondays / Tuesdays / |
| miércoles / jueves   | Wednesdays /Thursdays   |
| los fines de semana  | at weekends             |
| después del insti    | after school            |

| ¿Cómo organizas tu        | How do you organise your |
|---------------------------|--------------------------|
| semana?                   | week?                    |
| Bailo Zumba®.             | I dance Zumba®.          |
| Cocino para mi familia.   | I cook for my family.    |
| Escribo canciones.        | I write songs.           |
| Leo cómics / libros.      | I read comics / books.   |
| Monto en bici.            | I ride a bike.           |
| Saco fotos.               | I take photos.           |
| Toco el teclado.          | I play the keyboard.     |
| Veo un partido de fútbol. | I watch a football match |

| Expresiones de frecuencia | Expressions of frequency |
|---------------------------|--------------------------|
| una vez a la semana       | once a week              |
| dos veces a la semana     | twice a week             |
| a veces                   | sometimes                |
| a menudo                  | often                    |
| siempre                   | always                   |
| (casi) todos los días     | (almost) every day       |
| todos los fines de semana | every weekend            |

#### estrategia 1

#### Using the present tense

In this module you have revised two important irregular verbs - ser (to be) and ir (to go) - as well as the endings for regular verbs in the present tense.

How do you know if you really know a verb? Ask yourself:

- Do I know what it means when I see it?
- Can I pronounce it?
- Can I spell it correctly?
- Can I use it in a sentence?



9



SUBJECT: Spanish YEAR: 9

TOPIC: Viva 3 Verde Module 1 Somos Así

### I NEED TO KNOW:

how to describe things you like, your week, films and birthday celebrations

| Cartelera de cine               | What's on at the cinema  |
|---------------------------------|--------------------------|
| ¿Qué tipo de película es?       | What type of film is it? |
| Es                              | It is                    |
| una comedia                     | a comedy                 |
| una película de acción          | an action film           |
| una película de animación       | an animated film         |
| una película de aventuras       | an adventure film        |
| una película de ciencia ficción | a science-fiction film   |
| una película de fantasía        | a fantasy film           |
| una película de superhéroes     | a superhero film         |
| una película de terror          | a horror film            |

| ¿Vas a menudo al cine?         | Do you often go to the cinema?        |
|--------------------------------|---------------------------------------|
| Voy una vez al mes.            | I go once a month.                    |
| Voy dos veces al mes.          | I go twice a month.                   |
| Voy los domingos por la tarde. | I go on Sunday afternoons / evenings. |
| Voy los sábados por la mañana. | I go on Saturday mornings.            |

| ¿Qué tipo de películas te gustan?            | What type of films do you like? |
|----------------------------------------------|---------------------------------|
| Me encantan las comedias.                    | I love comedies.                |
| Me chiflan las películas de ciencia ficción. | I love science-fiction films.   |
| No me gustan las películas de terror.        | I don't like horror films.      |
| Mi película favorita es                      | My favourite fi lm is           |
| Mi actor favorito es                         | My favourite actor is           |
| Mi actriz favorita es                        | My favourite actress is         |

| ¿Cuándo vas a celebrar tu   | When are you going to    |
|-----------------------------|--------------------------|
| cumpleaños?                 | celebrate your birthday? |
| mañana                      | tomorrow                 |
| la semana que viene         | next week                |
| el fi n de semana que viene | next weekend             |
| el mes que viene            | next month               |
| el nueve de febrero         | on the ninth of February |

| ¿Cómo vas a celebrar?                | How are you going to celebrate?        |
|--------------------------------------|----------------------------------------|
| Voy a hacer karting.                 | I am going to do go-karting.           |
| Voy a ir a la bolera.                | I am going to go bowling.              |
| Voy a ir a un parque de atracciones. | I am going to go to a theme park.      |
| Voy a jugar al paintball.            | I am going to play paintball.          |
| Voy a pasar la noche en casa con mis | I am going to have a sleepover at home |
| amigos/as.                           |                                        |
| with my friends.                     |                                        |
| Voy a sacar muchas fotos.            | I am going to take lots of photos.     |
| Vamos a montar en una montaña rusa.  | We are going to ride a roller coaster. |
| Vamos a ver películas de terror      | . We are going to watch horror films.  |
| iVa a ser genial!                    | It's going to be great!                |

| Palabras muy frecuentes | High-frequency words |
|-------------------------|----------------------|
| casi                    | nearly, almost       |
| primero                 | first                |
| luego                   | then                 |
| después                 | afterwards           |
| más tarde               | later                |
| 0                       | or                   |
| У                       | and                  |
| pero                    | but                  |
| también                 | also                 |
| por supuesto            | of course            |