



Launceston College

Part of Athena Learning Trust

Year 7

**Revision
Guide**

This Year 7 Revision Guide contains some of the core knowledge needed to be successful in the Year 7 End of Year Assessments.

Complete all questions and check you are correct. The Year 7 Revision Guide is arranged in alphabetical order.

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There are no sections for English and maths. Please revise English and maths using Sparx Reader, Sparx Maths and Time Tables Rock Stars.

Year 7 French

This revision guide is designed to help you prepare for your Year 7 French End of Year Assessment by covering the key topics included in the test.

Section 1: Basics & Register Routine

To start every lesson, your teacher will greet you with "**Bonjour!**" (Hello!). At the end of the lesson, you can say "**Au revoir!**" (Goodbye), "**À bientôt!**" (See you soon), or "**À demain!**" (See you tomorrow).

Answering the Register:

- "**Présent!**" or "**Je suis là!**" (I am here).
- "**Il est absent**" (He is absent).
- **Note:** You would *not* say "Merci, Madame!" (Thank you) just to answer the register.

Greetings and Feelings:

- "**Comment tu t'appelles?**" = What is your name?
- "**Je m'appelle...**" = My name is...
- **Feelings (Positive to Negative):** Très bien (Very well) \rightarrow Bien (Well) \rightarrow Comme-ci, comme ça (So-so) \rightarrow Mal (Bad) \rightarrow Très mal (Very bad).

Practice Question 1: Which of these is the correct way to say "My name is"?

- A) Je me appelle
- B) Je m'apple
- C) Je m'appelle
- D) Je m'appel

Section 2: Numbers, Days, and Months

Days of the Week: Lundi, Mardi, Mercredi, Jeudi, Vendredi, Samedi, Dimanche. **Months:** Janvier, Février, Mars, Avril, Mai, Juin, Juillet, Août, Septembre, Octobre, Novembre, Décembre.

Numbers 1-10: Un, deux, trois, quatre, cinq, six, sept, huit, neuf, dix.

Key Number Rules:

- **11-20:** Onze, douze, treize, quatorze, quinze, seize, dix-sept, dix-huit, dix-neuf, vingt.
- **21, 31, etc.:** You must use "**et-un**" (e.g., *vingt-et-un* or *trente-et-un*).

Practice Question 2: What comes after "juillet" in the sequence: mai, juin, juillet...?

- A) Avril
- B) Août
- C) Septembre
- D) Janvier

Section 3: Age, Birthdays, and Origin

Talking about Age: In French, we use the verb *avoir* (to have) for age.

- "**J'ai seize ans**" = I am 16 years old (literally: I have 16 years).
- "**Mon anniversaire est le premier juillet**" = My birthday is the first of July.

Nationalities:

- "**Je suis d'Angleterre**" = I am from England.
- **Masculine vs. Feminine:** A boy says "**Je suis anglais**" (I am English); a girl says "**Je suis anglaise**". Similarly, it's "**français**" (m) and "**française**" (f).

Practice Question 3: How would a girl say "I am French"?

- A) Je suis français
- B) Je suis france
- C) Je suis française
- D) Je suis d'France

Section 4: School Subjects and Opinions

Subjects:

- **L'allemand** (German), **Le dessin** (Art), **La chimie** (Chemistry), **L'EPS** (PE), **Les langues** (Languages).

Adjectives to describe lessons:

- **Amusant** (Fun), **Intéressant** (Interesting), **Utile** (Useful).
- **Ennuyeux** (Boring), **Fatigant** (Tiring), **Compliqué** (Complicated).

Grammar Tip: When talking about subjects you like, use the definite article: "**J'aime l'anglais**" (I like English).

Practice Question 4: Which adjective means "tiring"?

- A) Amusant
- B) Fatigant
- C) Ennuyeux
- D) Utile

Practice Question 5: Why might someone like a subject according to the text?

- A) C'est compliqué
- B) C'est utile pour le futur
- C) C'est ennuyeux
- D) C'est trop long

Section 5: Family and Pets

Pets:

- **Un chien** (dog), **un chat** (cat), **un serpent** (snake), **une araignée** (spider), **un cheval** (horse), **une tortue** (tortoise).

Family Members:

- **Mon père** (father), **ma mère** (mother), **mon frère** (brother), **ma sœur** (sister), **mon grand frère** (big brother), **mon frère aîné** (older brother).

Describing People:

- **Sympa** (nice), **sportif** (sporty), **intelligent**, **généreuse** (generous), **marrante** (funny).
- **Paresseux** (lazy), **ennuyeux** (boring), **méchant** (mean).

Practice Question 6: Which pet is "un chat"?

- A) A dog
- B) A cat
- C) A rabbit
- D) A bird

Practice Question 7: How do you say "lazy" in French?

- A) Paresseux
- B) Sympa
- C) Intelligent
- D) Méchant

Section 6: Physical Descriptions

- **Eyes:** "J'ai les yeux bleus" (I have blue eyes).
- **Hair:** "J'ai les cheveux roux" (I have red/ginger hair).
- **Features:** "J'ai une barbe" (I have a beard) or "Je porte des lunettes" (I wear glasses).
- **Texture/Length:** "Longs et ondulés" (Long and wavy) or "courts" (short).

Practice Question 8: Translate "I have blue eyes."

- A) J'ai les bleus yeux
- B) J'ai les yeux bleu
- C) J'ai les yeux bleus
- D) J'ai yeux bleus

Section 7: Free Time Activities

Sports & Hobbies:

- **Faire de l'équitation** (Horse riding).
- **Jouer aux cartes** (Play cards).
- **Jouer de la guitare** (Play guitar).
- **Envoyer des textos** (Send text messages).

Tenses:

- **Past:** "Hier, j'ai décidé de..." (Yesterday, I decided to...).
- **Future:** "Demain, je vais..." (Tomorrow, I am going to...).

Practice Question 9: What does "jouer aux cartes" mean?

- A) To play cards
- B) To play guitar
- C) To go to the park
- D) To go horse riding

Practice Question 10: How do you say "Tomorrow" in French?

- A) Hier
- B) Demain
- C) Aujourd'hui
- D) Maintenant

Answer Key

1. **C** (Je m'appelle)
2. **B** (Août)
3. **C** (Je suis française)
4. **B** (Fatigant)
5. **B** (C'est utile pour le futur)
6. **B** (A cat)
7. **A** (Paresseux)
8. **C** (J'ai les yeux bleus)
9. **A** (To play cards)
10. **B** (Demain)

Year 7 Geography

This revision guide is designed to help you master the key concepts covered in your Year 7 Geography Assessment. It breaks down the main topics—Map Skills, Development, Rivers, Flooding, and Weather—into clear, manageable sections.

1. Map Skills

To navigate a map correctly, you must understand grid references and symbols.

- **Grid References:** Always read the **Easting** (horizontal number) first, then the **Northing** (vertical number). Remember: "Along the corridor and up the stairs."
- **Contour Lines:** These lines show the height and shape of the land. When they are **close together**, the slope is **steep**.
- **Symbols:** Standard symbols represent features. For example, blue areas typically represent **water** like reservoirs, and specific icons represent services like **car parks** or **picnic areas**.

Check Your Knowledge (Q1):

If you see contour lines packed very tightly together on a map of Stanage Edge, what does this tell you about the terrain?

- A) The land is perfectly flat
- B) There is a steep gradient
- C) It is a marshy area
- D) It is at sea level

2. Development and Global Gaps

Development measures how much a country is progressing and the quality of life for its people.

- **The Development Gap:** The difference in wealth and quality of life between the world's richest and poorest countries.
- **Indicators:** * **Social:** Birth rate and life expectancy.
 - **Economic: Gross Domestic Product (GDP)**, which measures the total value of goods and services.
 - **Combined: Human Development Index (HDI)**, which combines health, education, and wealth.

- **Migration: Push factors** are negative things that make you want to leave an area (e.g., war), while **Pull factors** are positive things that attract you to a new place (e.g., better jobs).

Check Your Knowledge (Q2):

Which indicator is used to measure a country's development by combining health, education, and wealth?

- A) GDP
- B) Birth Rate
- C) Human Development Index (HDI)
- D) Literacy Rate

3. Rivers and Landforms

Rivers change the landscape through **erosion** (wearing away rock) and **deposition** (dropping sediment).

- **Upper Course:** The steepest part. Features include **V-shaped valleys** and **waterfalls**. Waterfalls form when **hard rock** sits on top of **soft rock**.
- **Middle/Lower Course:** The land becomes flatter. You find **meanders** (bends) and **floodplains** (wide, flat areas that flood).
- **Meanders:** Erosion happens on the outside bend (high velocity), while **deposition** happens on the **inside bend** (low velocity).

Check Your Knowledge (Q3):

Where is a V-shaped valley most likely to be found in a river's journey?

- A) Lower Course
- B) Middle Course
- C) Upper Course
- D) The Estuary

4. Flooding: Causes and Management

Flooding occurs when a river's discharge exceeds its capacity.

- **Physical Causes:** Heavy rainfall or steep slopes that cause water to reach the river quickly.

- **Human Causes: Deforestation** (cutting down trees) or creating **impermeable surfaces** like concrete and tarmac that do not absorb water.
- **Management: * Soft Engineering: Afforestation** (planting trees) reduces flood risk by intercepting rain.
 - **Hard Engineering:** Man-made structures like **Dams and Reservoirs**.

Check Your Knowledge (Q4):

How does afforestation help prevent a river from flooding?

- A) It makes the river channel deeper
- B) Trees increase interception and slow down water flow
- C) It creates impermeable surfaces
- D) It increases surface runoff

5. Weather and Climate

- **Definitions: Weather** is the day-to-day state of the atmosphere; **Climate** is the average weather over a long period.
- **Rainfall Types:**
 - **Relief:** Air forced over mountains.
 - **Frontal:** Warm air meets cold air.
 - **Convectional:** The sun heats the ground, and air rises.
- **Factors:** Temperature decreases by **1°C for every 100 metres** of altitude. Urban areas are warmer because **concrete absorbs heat**.

Check Your Knowledge (Q5):

What is the name for the type of rainfall created when air is forced to rise over a mountain range?

- A) Frontal rainfall
- B) Convectional rainfall
- C) Relief rainfall
- D) Monsoon rainfall

Additional Practice Questions

Q6. What term describes the money or goods given by a government to help another country develop? A) Fairtrade B) Aid C) Pull Factor D) GDP

Q7. What happens to the river's energy when deposition occurs? A) Energy increases B) Energy stays the same C) Energy is lost D) The river stops moving

Q8. Which of the following is a SOCIAL indicator of development? A) Gross Domestic Product B) Birth Rate C) Total value of exports D) Number of factories

Q9. Surfaces that can absorb water are known as: A) Impermeable B) Non-porous C) Permeable D) Concrete

Q10. In the UK, from which direction does the prevailing wind typically blow? A) North B) East C) Southwest D) Northeast

Answer Key

1. **B** (Steep gradient)
2. **C** (HDI)
3. **C** (Upper Course)
4. **B** (Trees increase interception)
5. **C** (Relief rainfall)
6. **B** (Aid)
7. **C** (Energy is lost)
8. **B** (Birth Rate)
9. **C** (Permeable)
10. **C** (Southwest)

Year 7 History

This revision guide is designed to help you master the key topics for your Year 7 History Assessment. It covers everything from early migration to the social upheavals of the late Middle Ages.

Section 1: Migration and Early Britain

The British Isles have been shaped by waves of migrants for thousands of years.

- **Earliest Arrivals:** The first hunter-gatherers arrived roughly **800,000 years ago**.
- **The Romans:** Invaded and ruled Britain from **AD 43 to 410**.
- **The Angles and Saxons:** These groups came from **Northern Germany and Southern Denmark**.
- **Key Terms:**
 - **Migration:** When people move to live in a new place.
 - **Economic:** Related to **trade, money, and jobs**. An economic reason to move is finding better land or work.
 - **Social:** Related to how people **live and organize in groups**. A social reason to move is to live with family or people with similar traditions.
 - **Warfare:** People often migrate to **flee invasion and danger**.

Check Your Knowledge

1. What is an example of an economic reason for migration?
 - A. Escaping a war zone
 - B. Moving to find a higher-paying job
 - C. Joining a religious group
 - D. Moving to a warmer climate
2. Where did the Angles and Saxons originate?
 - A. Scandinavia
 - B. Northern Germany and Southern Denmark
 - C. The Mediterranean
 - D. North Africa
- 3.

Section 2: Medieval England and the Feudal System

In **1066**, the **Battle of Hastings** changed England forever. **William the Conqueror** was crowned King and established control using specific methods.

- **The Feudal System:** A pyramid system where the King sat at the top. He gave land to **Barons** in exchange for loyalty. **Knights** were given land by Barons in exchange for **fighting for their lord**. At the very bottom were **Serfs (peasants)**.
 - **The Domesday Book (1086):** Created to record **land ownership and wealth for taxation**. It is important today because it shows what England was like in 1086.
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Section 3: The Church and the Crusades

The Church was the center of medieval life, providing food and shelter to the poor. **Monks and nuns** lived in monasteries dedicated to prayer.

- **Conflict: Thomas Becket**, the Archbishop of Canterbury, was murdered after a long argument with **Henry II** over **Church power vs. Royal power**.
- **The Crusades:** These were holy wars to take control of **Jerusalem and the Holy Land**.
 - **Pope Urban II** called for the First Crusade in 1095.
 - The Muslim leader **Saladin** famously recaptured Jerusalem in 1187.
 - **Long-term effect:** Increased trade and cultural contact between Europe and the Middle East.

Check Your Knowledge

3. Why did King Henry II and Thomas Becket disagree?
 - A. They both wanted to be the Pope
 - B. Disagreements over trade routes to China
 - C. Conflict over the power of the Church versus the King
 - D. A dispute over who should lead the Crusades
4. Who called for the First Crusade?
 - A. William the Conqueror

- B. Saladin
 - C. Pope Urban II
 - D. King John
-

Section 4: Magna Carta

King John was unpopular because he lost land in France and **taxed the barons heavily**. In **1215**, at **Runnymede**, he was forced to sign the **Magna Carta**.

- **Significance:** It was a list of rules **limiting the King's power**. It proved that the **King was not above the law**.
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Section 5: Medieval African Empires

While Europe was in the Middle Ages, powerful empires flourished in West Africa.

- **Ghana, Mali, and Songhai:** These empires became wealthy through the **gold and salt trade routes**.
- **Mansa Musa:** The most famous ruler of Mali. He was a devout **Muslim** who went on a famous pilgrimage to **Mecca**. He showed his wealth by giving away gold and funding mosques.
- **Timbuktu:** Became a major center of **learning and trade**.
- **Trans-Saharan Trade:** Connected West Africa to North Africa and the Mediterranean, allowing for the exchange of gold, salt, and ideas.

Check Your Knowledge

5. Which two goods were the primary source of wealth for the Mali Empire?

- A. Silk and Spices
- B. Gold and Salt
- C. Wheat and Barley

D. Silver and Oil

6. Which city was the center of learning in the Mali Empire?

- A. Cairo
 - B. Mecca
 - C. Timbuktu
 - D. Lagos
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Section 6: Trade and Exploration

- **The Silk Road:** Not a single road, but a **network of trade routes** linking Europe and Asia. **Silk** was one of the most valuable products from China.
 - **Cultural Exchange: Ideas and religions** also spread along these routes.
 - **Marco Polo:** A European explorer who traveled to Asia and brought back knowledge of trade and new products.
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Section 7: Social Unrest (Black Death & Peasants' Revolt)

- **The Black Death (1347–1351):** A **bubonic plague** spread by **fleas on rats**. A common symptom was swollen lymph nodes called **buboes**.
 - **Effect:** It caused a massive **shortage of workers**, which led to major social change.
- **The Peasants' Revolt (1381):** Caused by **high taxes** and economic hardship following the plague.
 - Led by **Wat Tyler**, the peasants confronted the young **King Richard II**.

- The revolt was crushed, but it highlighted the peasants' deep discontent.

Check Your Knowledge

7. How was the Black Death primarily spread?
- A. Contaminated drinking water
 - B. Fleas living on rats
 - C. Breathing in cold winter air
 - D. Eating undercooked meat
8. What was a major result of the labor shortage caused by the Black Death?
- A. The Feudal System became stronger
 - B. Peasants could demand higher wages and more freedom
 - C. Everyone moved from the countryside to the cities
 - D. Trade with Asia stopped completely
9. Who was the leader of the Peasants' Revolt in 1381?
- A. Thomas Becket
 - B. Wat Tyler
 - C. William the Conqueror
 - D. Mansa Musa
10. What did the Magna Carta establish?
- A. That the King has absolute power
 - B. That the King is subject to the law
 - C. That England would be ruled by the Pope
 - D. That all taxes were illegal

Answer Key

1. **B** (Economic = jobs/money)
2. **B** (Northern Germany/Denmark)
3. **C** (Church vs. Royal power)
4. **C** (Pope Urban II)
5. **B** (Gold and Salt)
6. **C** (Timbuktu)
7. **B** (Fleas on rats)
8. **B** (Labor shortage led to social change)
9. **B** (Wat Tyler)
10. **B** (King is not above the law)

Year 7 Religious Studies

This revision guide is designed to help you master the key concepts for your **Year 7 Religious Studies and Worldviews Assessment**. It breaks down the core topics—from the basics of how we see the world to specific religious traditions and philosophical arguments.

Section 1: Worldviews and Social Science

A **worldview** is an overall view of life and existence. These views are important because they shape how people worship, live, think, and ask "big questions".

- **Social Science:** The scientific study of human society and social relationships.
- **Sociology:** Sociologists study how people and society affect each other.
- **Sociology of Religion:** Specifically looks at religion's effect on society and groups.
- **Methods:** Data is gathered through surveys, questionnaires, interviews, and historical documents.
- **Activism:** An activist is someone who actively pushes for change, specifically campaigning for political and social change. Key areas include climate change, equality, and challenging racism.

Revision Question 1: What is the main focus of a sociologist of religion?

- A) Proving which religion is the "true" one.
 - B) Studying how religion affects society and various groups.
 - C) Writing new religious laws for governments.
 - D) Studying the chemical composition of ancient religious relics.
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Section 2: Buddhism – The Path to Enlightenment

Buddhism began with **Siddhartha Gautama**. He was a prince who left his luxurious life after seeing suffering for the first time.

- **The Journey:** He became an **ascetic** (living on very little, sometimes just a grain of rice a day) before reaching **Enlightenment** under the Bodhi tree.
- **Core Concepts (The Three Marks of Existence):**
 - **Anicca:** Everything is impermanent and constantly changing.

- **Anatta:** There is no fixed, permanent "self" or soul.
- **Dukkha:** Life involves suffering, dissatisfaction, or unease.
- **The Four Noble Truths:** The first truth is that life involves suffering (**Dukkha**). Suffering can be ended by following the **Eightfold Path**.
- **The Wheel of Life (Samsara):** Represents the cycle of birth, death, and rebirth. It features the "Three Poisons" (greed, hatred, and ignorance) but does *not* directly depict the Five Precepts.

Revision Question 2: What does the term "Anicca" refer to in Buddhist teaching?

- A) The cycle of rebirth into animal forms.
- B) The belief that the self is an eternal soul.
- C) The truth that all things are impermanent and subject to change.
- D) The ultimate state of bliss and happiness.

Section 3: Abrahamic Traditions (Judaism, Christianity, Islam)

Abraham is the common founder of Judaism, Christianity, and Islam.

Pre-Abraham and the Origins of Sin

- **The Fall:** Adam and Eve disobeyed God in the Garden of Eden. This "Original Sin" affected all of humanity and explained the need for salvation.
- **Noah:** His story teaches that God values obedience and has power over nature.

Abraham's Covenant

- **Covenant:** A special promise. God promised to bless Abraham's descendants.
- **Sacrifice of Isaac:** Shows Abraham's total obedience to God.
- **Ibrahim in Islam:** Muslims view Ibrahim as a model of obedience. He and his son **Ishmael** are believed to have built the **Kaaba** in Mecca. The Kaaba represents the oneness of God.

Prophets and Jesus

- **Moses:** Led the Israelites out of slavery in Egypt (**The Exodus**). This story shows God bringing justice against oppression.
- **Leviticus:** Contains laws and customs regarding holiness and purity.
- **Jesus:** His message was radical because he loved his enemies and spent time with the "impure" (the poor and sick).
- **The Crucifixion:** Christians believe Jesus sacrificed himself for the sins of humanity. This is remembered on **Good Friday**.

Revision Question 3: Why is the story of the Exodus significant in the Bible?

- A) It describes the creation of the sun and moon.
- B) It tells how Moses led the Israelites out of slavery in Egypt.
- C) It explains the rules for building the Kaaba.
- D) It is the story of the first Christmas.

Revision Question 4: According to Islamic tradition, who built the Kaaba?

- A) Adam and Eve
- B) Moses and Aaron
- C) Ishmael and Ibrahim
- D) Muhammad and Jibril

Section 4: Arguments For and Against the Existence of God

Philosophers and theologians use specific terms to describe God and debate His existence.

Defining God

- **Omnipotent:** All-powerful.
- **Omniscient:** All-knowing.
- **Omnibenevolent:** All-loving and perfectly good.
- **Immanent:** God is present and active within the world.

Positions on Belief

- **Theism:** Belief in a God involved in the world.

- **Atheism:** Not believing in any god or gods.
- **Agnosticism:** Belief that we cannot know for sure if God exists.

The Arguments

- **Design Argument:** The universe is so complex and purposeful that it must have been designed.
 - *Criticism:* David Hume argued the world is imperfect, so it doesn't prove a perfect designer.
- **Cosmological Argument:** Everything has a cause; the "First Cause" must be God.
 - *Criticism:* Bertrand Russell argued the universe might not need a cause—it could just "be".
- **Problem of Evil:** The question of how a good/powerful God can allow suffering.
 - *Response:* Some argue suffering helps people grow or is a result of human **free will**.

Revision Question 5: What does "omniscient" mean?

- A) God is all-powerful.
- B) God is everywhere.
- C) God knows everything.
- D) God is perfectly good.

Revision Question 6: Which argument suggests that because the universe exists, it must have a "First Cause"?

- A) The Design Argument
- B) The Problem of Evil
- C) The Cosmological Argument
- D) The Argument from Miracles

Additional Practice Questions

7. What is a "conversion experience"? A) Changing from one political party to another. B) A change in religious belief triggered by a powerful spiritual event. C) Attending a religious school for many years. D) Moving from one country to another.

8. Which of the following is a criticism of the Cosmological Argument? A) The universe is too beautiful to be a mistake. B) If everything needs a cause, then what caused God? C) Human beings are the ones who designed the world. D) Science proves that God exists.

9. In Christianity, what event is remembered through the sharing of bread and wine? A) The birth of Jesus. B) The Last Supper. C) The parting of the Red Sea. D) The building of the Temple.

10. What was the "radical" aspect of Jesus' treatment of people? A) He only spoke to the Kings and Queens. B) He spent time with the poor, the sick, and the "impure". C) He told people to ignore all previous laws. D) He suggested that Roman Emperors were gods.

Answer Key

1. B
2. C
3. B
4. C
5. C
6. C
7. B
8. B
9. B
10. B

Year 7 Science

This revision guide is designed to help you master the core concepts for your **Year 7 Science Assessment**. Use the summaries to review the key facts and then test yourself with the multiple-choice questions throughout.

Topic 1: Particles and States of Matter

Everything around us is made of **particles**, which are defined as small parts or portions of matter.

The Three States of Matter

- **Solids:** Particles are in a fixed position and cannot be compressed. They have a fixed shape.
- **Liquids:** Particles are touching but randomly arranged. They can flow but cannot be compressed.
- **Gases:** Particles are far apart and spread out randomly. Gases can be compressed because there are big empty spaces between the particles.

Changes of State and Diffusion

- **Condensing:** The change from a gas to a liquid.
- **Melting and Boiling Points:** A substance is a **liquid** if the current temperature is between its melting and boiling points.
- **Diffusion:** The spreading out of particles from an area of **high concentration** to an area of **lower concentration**. Increasing temperature increases the rate of diffusion because particles have more energy and move faster.

Revision Question 1: What happens to particles during condensation?

- A) They move further apart and gain energy.
- B) They move closer together and change from gas to liquid.
- C) They stop moving entirely.
- D) They change from a solid to a liquid.

Revision Question 2: Why can a gas be squashed (compressed) more easily than a solid?

- A) Gas particles are softer.
 - B) Gas particles are larger.
 - C) There are large gaps between gas particles.
 - D) Gas particles are not made of matter.
-

Topic 2: Energy and Power

Energy is measured in **Joules (J)**. The **Law of Conservation of Energy** states that energy cannot be created or destroyed, only transferred.

Energy Stores and Transfers

- **Gravitational Store:** Filled when an object is lifted.
- **Elastic Store:** Increased when an object, like a rubber band, is stretched.
- **Conduction:** Thermal energy moving through a solid (like a metal rod) from particle to particle.
- **Convection:** Thermal energy transfer in liquids or gases where warm particles rise and cool particles sink due to density changes.
- **Radiation/Absorption:** A black surface in sunlight gains energy by **absorbing** it.

Efficiency and Power

- **Power:** The rate at which energy is transferred by a device.
- **Inefficiency:** When a device transfers most of its energy into a **non-useful store**, like wasted heat.
- **Efficiency Formula:** $\text{Efficiency} = \frac{\text{Useful Output}}{\text{Total Input}} \times 100\%$.

Revision Question 3: If a motor has a total energy input of 100J and 80J is wasted as heat, what is its efficiency?

- A) 80%
- B) 20%
- C) 100%

D) 50%

Revision Question 4: Which process explains why hot air rises above a radiator?

A) Conduction

B) Evaporation

C) Convection

D) Radiation

Topic 3: Cells and Organization

The **cell** is the most basic unit of life. Multi-cellular organisms are organized in a specific hierarchy: **Cell \rightarrow Tissue \rightarrow Organ \rightarrow Organ System**.

Cell Structures

- **Nucleus:** The control center containing genetic material (DNA).
- **Cell Wall:** Found in plant cells, but **never** in animal cells.
- **Chloroplasts:** Found in plants to absorb light energy for **photosynthesis**.
- **Mitochondria:** Provides energy; sperm cells have many to provide energy for swimming.

Specialized Cells and Reproduction

- **Root Hair Cells:** Have a large surface area to increase water and mineral absorption.
- **Total Magnification:** Calculated by multiplying the eyepiece lens by the objective lens (e.g., $10 \times 40 = 400$).
- **The Menstrual Cycle:** The uterus lining builds up to prepare to receive and nourish a fertilized egg.

Revision Question 5: Which of these is the correct order of organization from simplest to most complex?

A) Tissue \rightarrow Cell \rightarrow Organ \rightarrow Organ System

B) Cell \rightarrow Tissue \rightarrow Organ \rightarrow Organ System

C) Organ \rightarrow Tissue \rightarrow Cell \rightarrow Organ System

D) Organ System \rightarrow Organ \rightarrow Tissue \rightarrow Cell

Topic 4: The Periodic Table and Atoms

Atoms are made of subatomic particles. **Electrons** have a negative charge and orbit the nucleus. Most of the atom's mass is in the **nucleus** (protons and neutrons).

Elements and Compounds

- **Elements:** Contain only one type of atom.
- **Compounds:** Consist of two or more elements chemically joined together.
- **Atomic Number:** The number of **protons** in an atom. In a neutral atom, the number of protons equals the number of electrons.
- **Calculating Neutrons:** $\text{Relative Atomic Mass} - \text{Atomic Number} = \text{Number of Neutrons}$.

Groups and Reactivity

- **Alkali Metals (Group 1):** Soft, low density, and react vigorously with water.
- **Halogens (Group 7):** Become **less reactive** as you move down the group.
- **Chemical Reactions:** Indicated by permanent color changes or the production of bubbles (new gas).

Revision Question 6: An atom has an atomic number of 6 and a mass number of 14. How many neutrons does it have?

- A) 6
- B) 14
- C) 20
- D) 8

Revision Question 7: Which observation most likely indicates a chemical change?

- A) A block of ice melting.
- B) Salt dissolving in water.
- C) Bubbles of gas forming when two liquids are mixed.
- D) A glass bottle breaking.

Topic 5: Forces and Space

A **force** is a push or pull between interacting objects , measured in **Newton's (N)**.

Weight and Mass

- **Mass:** The amount of matter in an object; it stays the same everywhere.
- **Weight:** The force of gravity on that mass; it changes depending on the planet's gravity.
- **Formula:** $\text{Weight} = \text{mass} \times \text{gravitational field strength}$.

Balanced and Unbalanced Forces

- **Balanced Forces:** An object stays stationary or moves at a constant speed.
- **Terminal Speed:** When falling, weight and air resistance are balanced.
- **Upthrust:** The upward force on an object in a fluid. If a 0.3kg block floats, the upthrust equals its weight ($0.3 \times 9.8 = 2.94\text{N}$).

Revision Question 8: Which of these is a non-contact force?

- A) Friction
- B) Magnetism
- C) Air Resistance
- D) Upthrust

Revision Question 9: If a car has a 500N thrust forwards and 500N of air resistance backwards, what happens?

- A) It speeds up.
- B) It slows down.
- C) It moves at a constant speed.
- D) It turns a corner.

Revision Question 10: Which planet is the largest in our Solar System?

- A) Saturn
- B) Jupiter
- C) Neptune
- D) Earth

Answer Key for Revision Questions

1. **B** (Gas to liquid)
2. **C** (Empty space between particles)
3. **B** (20J useful / 100J total = 20%)
4. **C** (Convection)
5. **B** (Cell \rightarrow Tissue \rightarrow Organ \rightarrow System)
6. **D** ($14 - 6 = 8$)
7. **C** (Gas production)
8. **B** (Magnetism acts at a distance)
9. **C** (Forces are balanced)
10. **B** (Jupiter)

Year 7 Spanish

This revision guide is designed to help you prepare for your Year 7 Spanish End of Year Assessment. It covers the essential topics from the test, including greetings, numbers, school, family, and free-time activities.

Section 1: Register Routine and Basics

At the start of every lesson, your teacher will greet you with "**¡Hola!**" or "**¡Buenos días!**". To answer the register, you can say "**¡Presente!**" or "**¡Estoy aquí!**". If someone else is missing, you say "**Está ausente**".

Key Phrases:

- **Greetings:** ¡Hola! (Hello), ¡Buenos días! (Good morning) .
- **Farewells:** ¡Adiós! (Goodbye), ¡Hasta la vista! (See you), ¡Hasta pronto! (See you soon) .
- **Feelings (Positive to Negative):** Fenomenal \rightarrow Muy bien \rightarrow Bien \rightarrow Regular \rightarrow Mal \rightarrow Muy mal \rightarrow Fatal.
- **Questions:** "¿Cómo te llamas?" (What is your name?) .

Practice Question 1: Which phrase would you NOT say to your teacher at the end of a lesson? A) ¡Hasta la vista! B) ¡Adiós! C) ¡Hola! D) ¡Hasta pronto!

Section 2: Numbers, Days, and Colors

Days of the Week: Lunes, martes, miércoles, jueves, viernes, sábado, domingo.

Numbers 1-30:

- **1-10:** Uno, dos, tres, cuatro, cinco, seis, siete, ocho, nueve, diez.
- **11-20:** Once, doce, trece, catorce, quince, dieciséis, diecisiete, dieciocho, diecinueve, veinte.

- **21-30:** Veintiuno, veintidós, veintitrés, veinticuatro, veinticinco... treinta.
 - Note: For 16-19, use the combined form like "dieciséis," not "diez y seis".

Colors:

- **Purple:** Morado.
- **Red:** Rojo.
- **Green:** Verde.

Practice Question 2: What is the correct way to write the number 16 in Spanish? A) Diez y seis B) Diecisis C) Dieciséis D) Diece y seis

Section 3: Age, Birthdays, and Origin

Talking about Age: In Spanish, we use the verb **tener** (to have) for age.

- **"Tengo dieciséis años"** = I am 16 years old.

Birthdays and Months:

- **Months:** Enero, febrero, marzo, abril, mayo, junio, julio, **agosto**, septiembre, octubre, noviembre, diciembre.
- **Date:** "Mi cumpleaños es el uno de julio" (My birthday is the first of July).

Origin and Nationality:

- **Origin:** "Soy de Inglaterra" (I am from England).
- **Nationalities:**
 - Boy: **Inglés** (English), **español** (Spanish).
 - Girl: **Inglesa** (English), **española** (Spanish).

Practice Question 3: How would a boy say "I am Spanish"? A) Soy España B) Soy español C) Soy española D) Soy de español

Section 4: School Subjects and Opinions

Subjects:

- **Languages:** Lenguas.
- **PE:** Educación física.
- **History:** Historia.

Giving Opinions:

- **Positive:** Me encanta (I love), me gusta mucho (I like a lot), prefiero (I prefer).
- **Negative:** No me gusta (I don't like), odio (I hate).

Adjectives for School:

- **Positive:** Interesante, divertido (fun), útil para el futuro (useful for the future).
- **Negative:** Agotador (tiring), aburrido (boring), complicado.

Practice Question 4: Which adjective means "tiring"? A) Aburrido B) Divertido
C) Útil D) Agotador

Practice Question 5: Translate: "I love PE because it is fun." A) Me gusta el educación física porque es divertida. B) Me encanta la educación física porque es divertida. C) Me encanta el educación física porque es divertido. D) Odio la educación física porque es divertida.

Section 5: Family and Pets

Pets:

- **Un perro** (dog), **un gato** (cat), **un pájaro** (bird), **un conejo** (rabbit), **un pez** (fish), **una tortuga** (tortoise), **una serpiente** (snake), **una araña** (spider), **un caballo** (horse).

Family:

- **Padre** (father), **madre** (mother), **hermano** (brother), **hermana** (sister), **hermana mayor** (big sister).

Descriptions:

- **Positive:** Divertido (funny), deportista (sporty), inteligente, generosa, graciosa.
- **Negative:** Perezoso (lazy), aburrida, antipática (unpleasant).

Practice Question 6: If a pet is "un gato," what is it? A) A dog B) A bird C) A cat D) A fish

Practice Question 7: How do you say "lazy" in Spanish? A) Divertido B) Perezoso C) Inteligente D) Simpático

Section 6: Physical Descriptions

- **Eyes:** "Tengo los ojos azules" (I have blue eyes).
- **Hair:** "Tengo el pelo pelirrojo" (I have red/ginger hair).
- **Features:** "Llevo barba" (I have a beard), "llevo gafas" (I wear glasses), "tengo pecas" (I have freckles).
- **Hair Styles:** "Largo y ondulado" (Long and wavy), "rubio" (blonde), "gris" (grey), "moreno" (brown/dark).

Practice Question 8: Which sentence is the correct way to say "I have blue eyes"? A) Tengo los ojos azul. B) Tengo ojos azules. C) Tengo los ojos azules. D) Tengo azules ojos.

Section 7: Free Time Activities

- **Activities:** Quedar con mis amigos (meet up with friends), ir al parque (go to the park),

tocar el piano (play the piano), hacer senderismo (hiking), pasear al perro (walk the dog).

- **Tenses:**

- **Past:** "Ayer, decidí..." (Yesterday, I decided...).
- **Future:** "Mañana, voy a..." or "Mañana, quiero..." (Tomorrow, I am going to... / I want to...).

Practice Question 9: What does "pasear al perro" mean? A) To play with the cat B) To walk the dog C) To go to the park D) To feed the bird

Practice Question 10: What did Silvia do yesterday? A) Played the piano B) Met up with friends C) Did her homework D) Went to the park

Answer Key

1. **C** (¡Hola!)
2. **C** (Dieciséis)
3. **B** (Soy español)
4. **D** (Agotador)
5. **B** (Me encanta la educación física porque es divertida)
6. **C** (A cat)
7. **B** (Perezoso)
8. **C** (Tengo los ojos azules)
9. **B** (To walk the dog)
10. **C** (Did her homework)