12

Resources Online
PowerPoint Slides
Worksheets
Videos
Games

www.reachoutcf.com/resources

www.reachoutcf.com/maths-resources

Pass Functional Skills

A really useful website for your studies and revision.

Entry Level 3 →

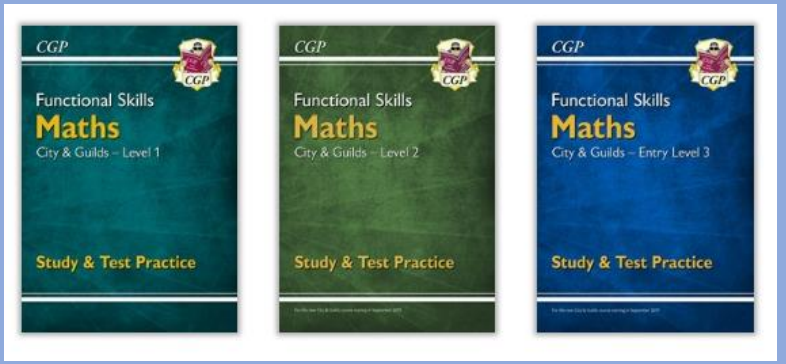
https://passfunctionalskills.co.uk

- Study Guides
- Practice Questions
- Video Demos
- Past Papers

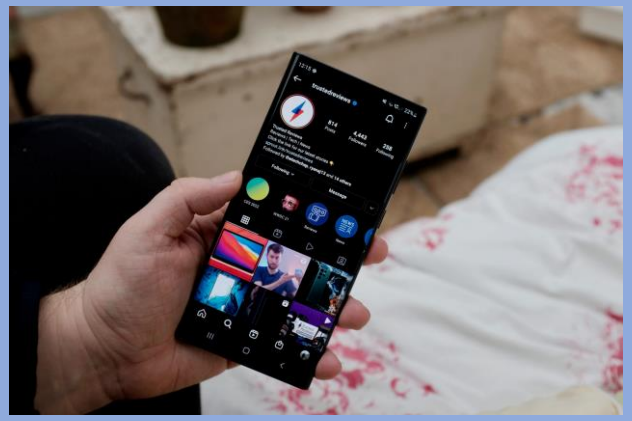
Level 1 →

Introductions

- The CGP textbooks are a fantastic resource for your revision.

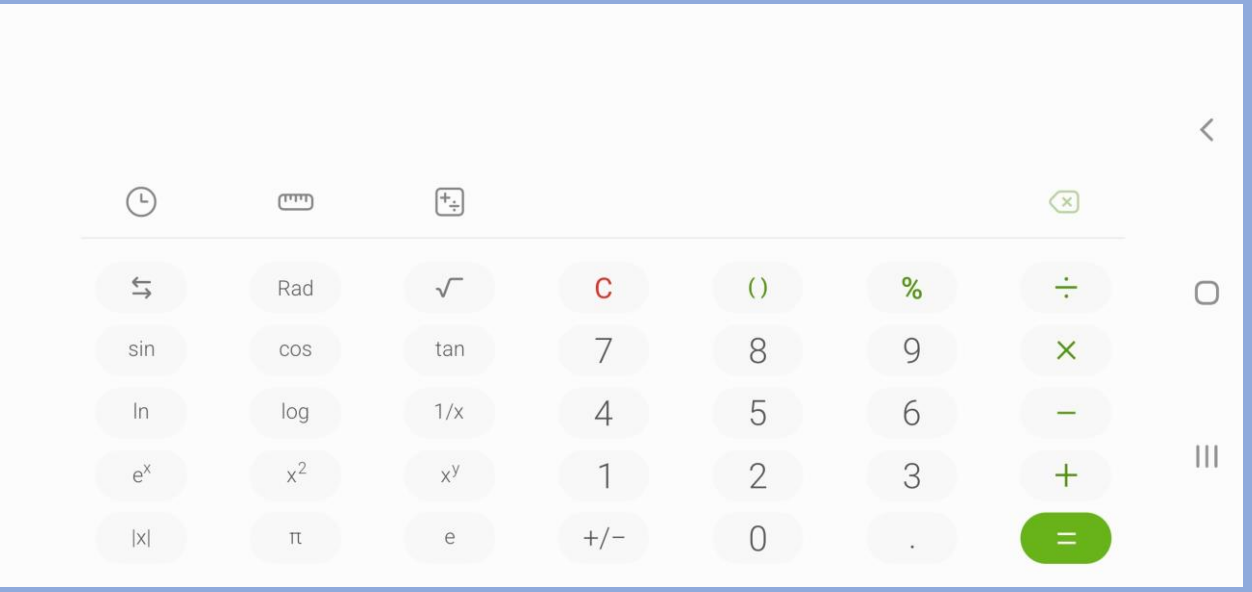


- You can use your phone when prompted, and as a calculator, but please keep it on silent during the lesson.

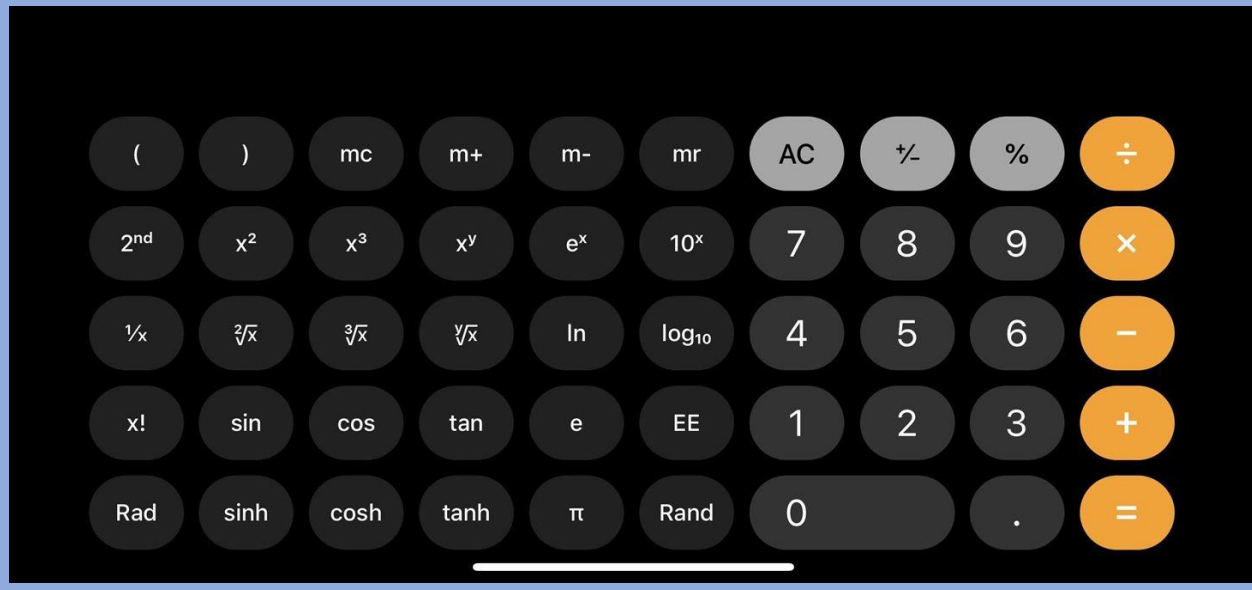


- Please make a note of your scores for interactive games as they let me know how well you are progressing.

Android



Apple



Rotate your phone in the calculator app to reveal additional functions.

Accessibility – For home study

- You can use your phone to read text for you.
- Download the app Google Lens.
- Select the Text option from the bottom of the screen.
- Take a picture of the text.
- Click the Listen button.
- The text will be read to you.
- Note: Apps can sometimes make mistakes so be careful to watch the moving highlights on the screen.

Download

https://play.google.com/store/apps/details?id=com.google.ar.lens&hl=en_GB&gl=US

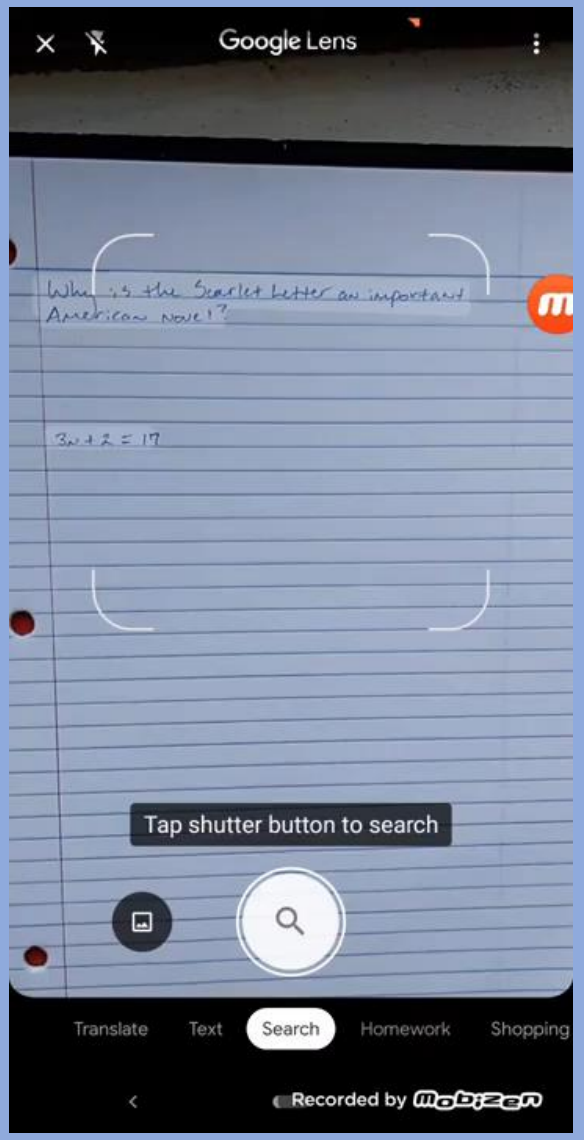
Using Google Lens

https://www.youtube.com/watch?v=dkvo50_UAqU

Google Lens can help with your homework!

The Google Lens Homework Help – TracSoft Inc
https://www.youtube.com/watch?v=SOC-d4VDKOY

- Always attempt questions first before using the application.
- If you do use Google Lens to solve a Maths problem, make sure you follow through the solution carefully, making sure you understand the steps it is showing you.
- You won't be able to use Google Lens in an exam, so once again, make sure you understand the process it is showing you.
- And don't forget…ALWAYS READ THE QUESTION…the question may ask for a written answer e.g. Bob does the following calculation…was he right? (Answer Yes or No with a sentence).



Weight, Capacity, Temperature and Time

Lesson 12

Consider an Olympic Swimming Pool

- **Have a guess at how much water it contains in litres…**
- Typically, an Olympic Pool is **50m** long, **25m** wide and **2m** deep.
- The pool has a capacity of 2500 cubic metres.
- There are 1,000 litres in a cubic metre.
- The capacity of the pool is : **2,500,000 litres** or 2.5 Ml (megalitres – note the capital M)

- **How much does all that water weigh?**
- If one litre of water weighs 1kg then it will weigh…
- **2,500,000 kg** or **2,500 tonnes** (a cubic metre of water weighs 1 tonne)

- **Have a guess at the record time for the 100 metre (2 lengths of the pool) freestyle swim…**
- **46.80 seconds by Pan Zhanle of China on 11th February 2024.**
- **What is the typical water temperature of an Olympic Swimming Pool?**
- **22C**

Lesson Intentions: Monday 4th March 2024

Part 1: Weight and Capacity

- Compare measures of weight including grams and kilograms (E3.M16)
- Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division. (E3.M14)
- Compare measures of capacity in ml and litres. (E3.M17)
- Convert between units of length, weight, capacity, money and time, in the same system. (L1.M20)

Part 2: Time and Temperature

- Read, measure and record time using a.m. and p.m. (E3.M12)
- Read time from analogue clocks and 24 hour digital clocks in hours and minutes. (E3.M13)

In this lesson we will look at UNSDG 6 – Clean Water & Sanitation

United Nations Sustainable Development Goals


Recap

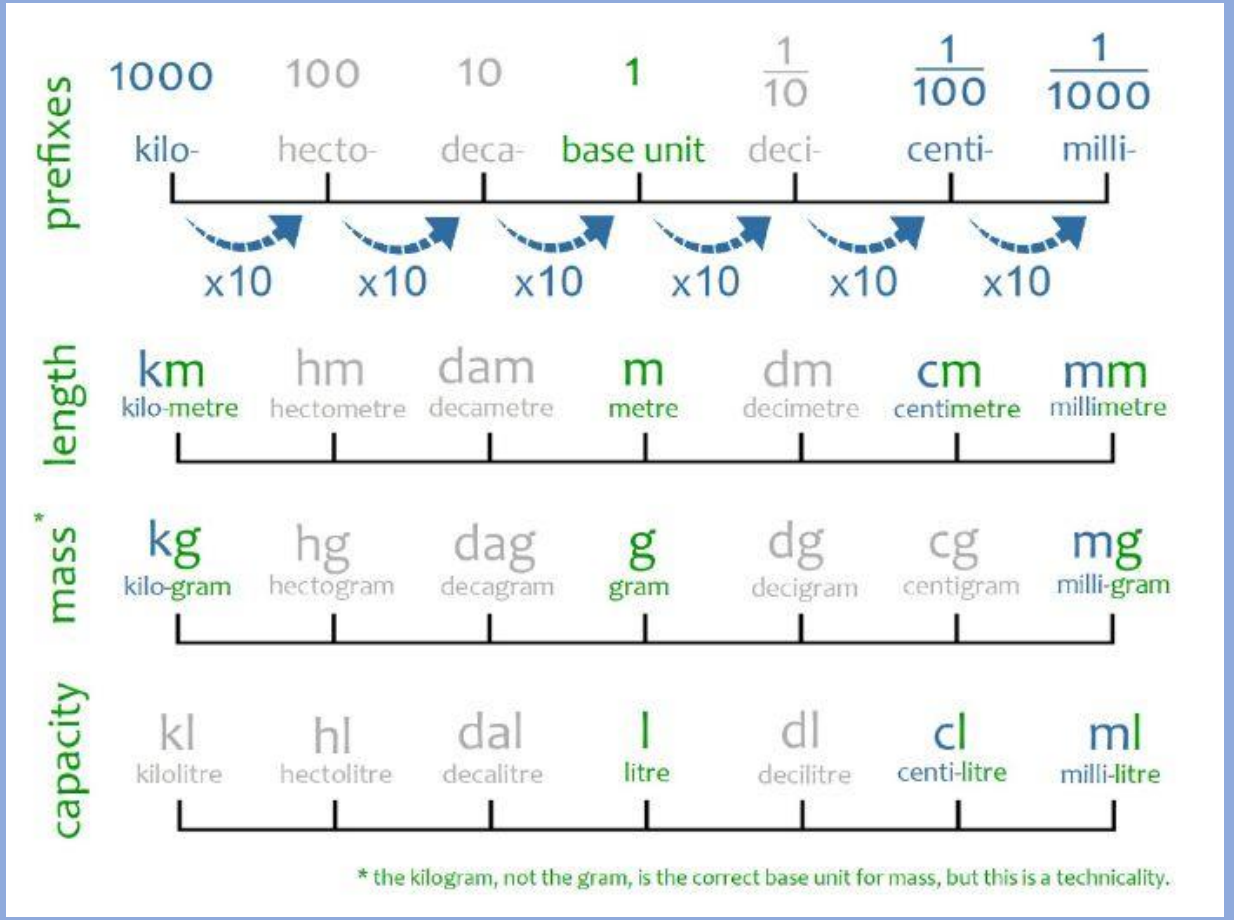
Recap – Last lesson we looked at:

- Units, Money, Length and Angles
- Education for Sustainable Development – UNSDG 1 – No Poverty

Today, in session 1, we will have a quick recap of Units, Money, Length and Angles before covering Weight and Capacity.

In session 2, we will look at Time and Temperature.

Units and Prefixes



Quiz: Metric Conversion

Hints:

There are 28.3g in 1oz (ounce).

There are 454g in 1lb (pound).

There are 8km in 5 miles.

You may use a calculator.


02 :00

Quiz: Metric Conversion

What was your score?

EL3 CGP Textbook p.47

Practice Questions

1) Circle the units of length: metre mile millilitre

2) Circle the units of weight: centimetre gram ounce

3) Circle the units of capacity: millilitre kilometre gallon

4) Underline the units in the following sentences:

   a) An antique clock is 1.7 metres tall and 40 centimetres wide.

   b) A cardboard box weighs 200 g. When it's filled with books it weighs 14 kg.

   c) A barrel contains 35 gallons of oil.

5) How many metres are in a kilometre?

.....

6) How many grams are in a kilogram?

.....

7) How many millilitres are in a litre?

.....

8) In the following pairs, circle the unit that is bigger.

   a) millimetre or centimetre

   b) kilometre or metre

   c) millilitre or litre

9) Fill in the table with an appropriate unit for each measurement.

Measurement	Unit
Weight of a dog	.....
Height of a person	.....
Capacity of a saucepan	.....
Length of an apple seed	.....

UK Money uses a **decimal** system

- There are **100p** (pennies/pence) in every **£1**
- When we quote amounts in money, we always use **2 decimal places** (to account for the above fact).
- If we had **150p**, we would NOT write ***£1.5***, but **£1.50** (the 5 being the first decimal place and the 0 being the second decimal place).
- When we work with money, always be aware of whether you are working in **p** (pennies/pence) or **£** (pounds).

Denominations:

- How many pennies are there in a pound?
- 100
- How many 2p's are there in a pound?
- 50
- How many 5p's are there in a pound?
- 20
- How many 10p's are there in a pound?
- 10
- How many 20p's are there in a pound?
- 5
- How many 50p's are there in a pound?
- 2
- How many £5 notes in a hundred pounds?
- 20
- How many £10 notes in a hundred pounds?
- 10
- How many £20 notes in a hundred pounds?
- 5
- How many £50 notes in a thousand pounds?
- 20

1p 2p 5p 10p

20p 50p £1.00 £2.00

£5.00

£10.00

£20.00

£50.00

Converting between pounds and pence (CGP EL3 p.30-36)

Pounds and Pence

1) If you get a question on money, the units will probably be pounds (£) or pence (p).

2) You need to be able to switch between using pounds and using pence.
Remember that £1 = 100p.

To go from pounds (£) to pence (p), multiply by 100.

To go from pence (p) to pounds (£), divide by 100.

EXAMPLES:

1) What is £2.60 in pence?

Answer: You're going from pounds to pence, so multiply by 100.

£2.60 × 100 = **260p**

2) What is 70p in pounds?

Answer: You're going from pence to pounds, so divide by 100.

70p ÷ 100 = **£0.70** ← Correct money format is to write two numbers after the decimal point — so write £0.70, not £0.7.

Estimating with rounding (CGP EL3 p.30-36)

You can use rounding to estimate answers to money questions.

EXAMPLE:

Carl is buying supplies on a company credit card. So far he has spent £15.99, £13.99, and £127.99. Estimate how much he has spent so far.

1) First round all the numbers to the nearest £.
   - £15.99 rounds up to £16.
   - £13.99 rounds up to £14.
   - £127.99 rounds up to £128.

2) Then add them together: 16 + 14 + 128 = £158

   So Carl has spent about **£158** so far.

You can quite easily find the actual total by working with the leftover pennies. In each of the amounts above we have added on a penny (when rounding up). So, knowing that there are 3 extra pennies, we can simply deduct 3p from our total: £158.00 - £0.03 = £157.97

Money & Percentage: Interest (CGP L1 p.47-49)

1) Interest is money that's added on to the value of something. It's given as a percentage.

2) For example, money saved in a bank account earns interest. Items that you buy on payment plans also cost more over time because interest is charged on them.

3) When working with interest, calculate the percentage of the amount and then add it to the original amount.

EXAMPLE:

Cara earns 5% interest on her savings. She has £50 in her account. How much money will she have once the interest has been added?

Find 5% of £50: $\frac{5}{100} \times 50 = 5 \div 100 \times 50 = £2.50$

Add this on to £50: $50 + 2.50 = \mathbf{£52.50}$

L1 Past Paper – Non Calculator

1 (c) The cost of a return train ticket from London to Fort William is £176

Don sees an offer which gives him a 15% discount.

How much money will Don save if he has the discount?

[2 marks]

Your answer: **£**

You can watch the video here: https://www.youtube.com/watch?v=Ay7a1n2JBiA

This video if from the Pass Functional Skills Website: https://passfunctionalskills.co.uk

Length (CGP EL3 p.48-50)

Length is How Long Something is

You might have to answer questions where you have to do calculations with lengths.

EXAMPLE 1:

Colette has a 5 ft length of fabric. She buys another 0.5 ft long piece.
What is the total length of fabric Colette has now?

To find the total length, add together the lengths of the two pieces:

Total length = 5 ft + 0.5 ft = 5.5 ft

So Colette has **5.5 ft** of fabric.

EXAMPLE 2:

Matthew needs to paint a line halfway along a football pitch.
The pitch is 100 m long. Where should Matthew paint the line?

To find out where halfway along the pitch is, divide the length of the pitch by 2:

Halfway along the pitch = 100 m ÷ 2 = 50 m

So Matthew needs to paint the line at **50 m**.

Length – Changing Units (CGP EL3 p.48-50)

Changing from One Unit to Another

1) If a number has units after it, then you can only add or take away another number with the same units.
2) So to answer some questions, you might need to change from one unit to another.
3) You can use the tables on pages 45 and 46 to help you change between different units.

This table will help you change between units of length:

Length
1 cm = 10 mm
1 m = 100 cm
1 km = 1000 m

You won't get tables like this in your test, so you'll need to learn them.

EXAMPLE:

Calvin's ladder is 2 m long. He extends it by 110 cm.
How long is the ladder now?

You need to add 110 cm to 2 m, but you can't because the units are different.

You first need to change one of the lengths so that they both have the same units.

You can see from the table that 1 m = 100 cm.
So to change m into cm you multiply by 100:

Length
1 cm = 10 mm
1 m = 100 cm
1 km = 1000 m

$$2 \times 100 = 200 \text{ cm}$$

Now the units are all the same (cm), you can add the two lengths together:

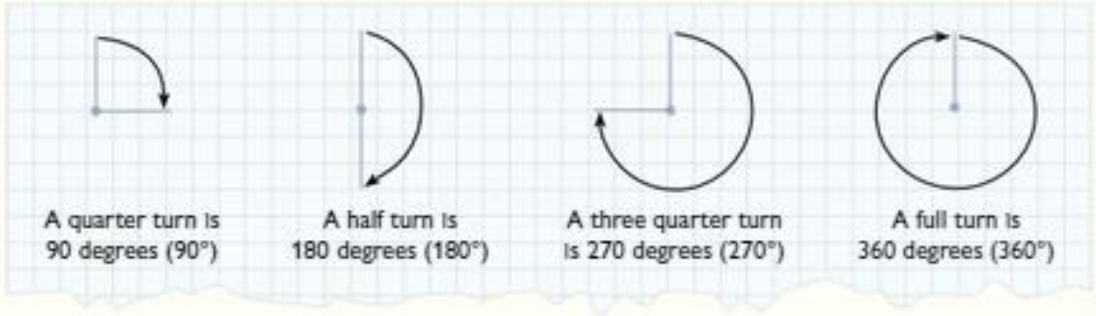
200 cm + 110 cm = 310 cm.

So Calvin's ladder is **310 cm** long when it's extended.

Angles (CGP L1 p.76-77)

Angles Measure How Far Something Has Turned

1) Angles tell you how far something has turned from a fixed point.
The bigger the angle, the bigger the turn. Angles are measured in degrees (°).



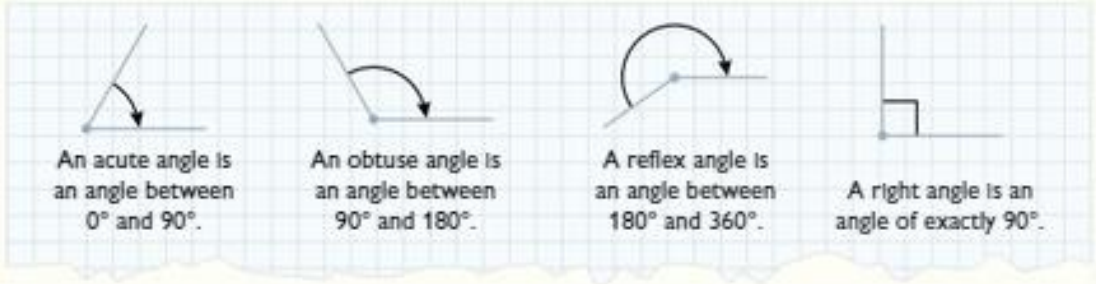
A quarter turn is 90 degrees (90°)

A half turn is 180 degrees (180°)

A three quarter turn is 270 degrees (270°)

A full turn is 360 degrees (360°)

2) There are special names for angles depending on their size.



An acute angle is an angle between 0° and 90°.

An obtuse angle is an angle between 90° and 180°.

A reflex angle is an angle between 180° and 360°.

A right angle is an angle of exactly 90°.

3) Angles can be measured clockwise or anticlockwise.

Clockwise

Anticlockwise

Angles (CGP L1 p.76-77)

You Can Measure Angles Between Lines

You can use a protractor to measure angles of up to 180°.

To measure the angle between two lines...

1) Put the cross on the protractor over the point where the lines meet.
2) Line up the bottom line on the protractor with one line of the angle.

3) Then just read the scale. Use the scale that has 0 on the line of your angle. This angle measures 45°.

Game: Alien Angles

https://www.mathplayground.com/alienangles.html


04:59

Game: Alien Angles

https://www.mathplayground.com/alienangles.html

How many aliens did you rescue?

Section 2: Measure, Shape & Space
Part 1: Weight, Capacity & Temperature

Part 1: Weight, Capacity & Temperature

Weight

NOUN [mass noun] a body's relative mass or quantity of matter contained by it, giving rise to a downward force; the heaviness of a person or thing.

Physics the force exerted on the mass of a body by a gravitational field.

Capacity

NOUN the maximum amount that something can contain.

From the Latin ‘capacitas’ – take or hold

Temperature

NOUN the degree or intensity of heat present in a substance or object.

From the Latin ‘temperatura’ – restrain (which related to tempering metals)

Weight: CGP EL3 p.51

Weight is How Heavy Something is

You need to be able to solve problems involving weight.

EXAMPLE 1:

Aiden fills a box with books and board games.
The books weigh 4.5 kg. The board games weigh 2.5 kg.
The empty box weighs 0.2 kg. How much does the filled box weigh?

Add up the weights of the books, the board games and the empty box:

4.5 kg + 2.5 kg + 0.2 kg = 7.2 kg

So the filled box weighs **7.2 kg**.

Weight: CGP EL3 p.51

EXAMPLE 3:

Ellie buys a 1.5 kg bag of muesli. She buys a 450 g box of muesli too.
What is the total weight of muesli Ellie has bought?

First you need to change one of the weights, so they both have the same units.

Remember, 1000 g = 1 kg.
So to change g to kg you divide by 1000.

450 ÷ 1000 = 0.45 kg.

Now the units are all the same (kg),
you can add the two weights together:

1.5 kg + 0.45 kg = 1.95 kg.

So the muesli weighs **1.95 kg** in total.

Weight
1000 g = 1 kg

This table is also on page 46.

Practice Questions: CGP EL3 p.52

1) Sunaira recently lost 11 lb in weight. Before this she weighed 178 lb.
How much does she weigh now?

.....

2) Paul needs to carry some bags to his car. Each bag weighs 5 kg.
Paul can safely carry 20 kg in one go. How many bags can he carry in one go?

.....

.....

3) Harriet buys 1 kg of pasta. She uses 350 g for a recipe. How much does she have left?

.....

.....

Game: Potion making with weighing scales

Drag and drop the weights to make the total.

Add the ingredient to balance the scales. Click done. Add all Ingredients.


02 :00

Game: Potion making with weighing scales

Did you make the potion in 2 minutes ?

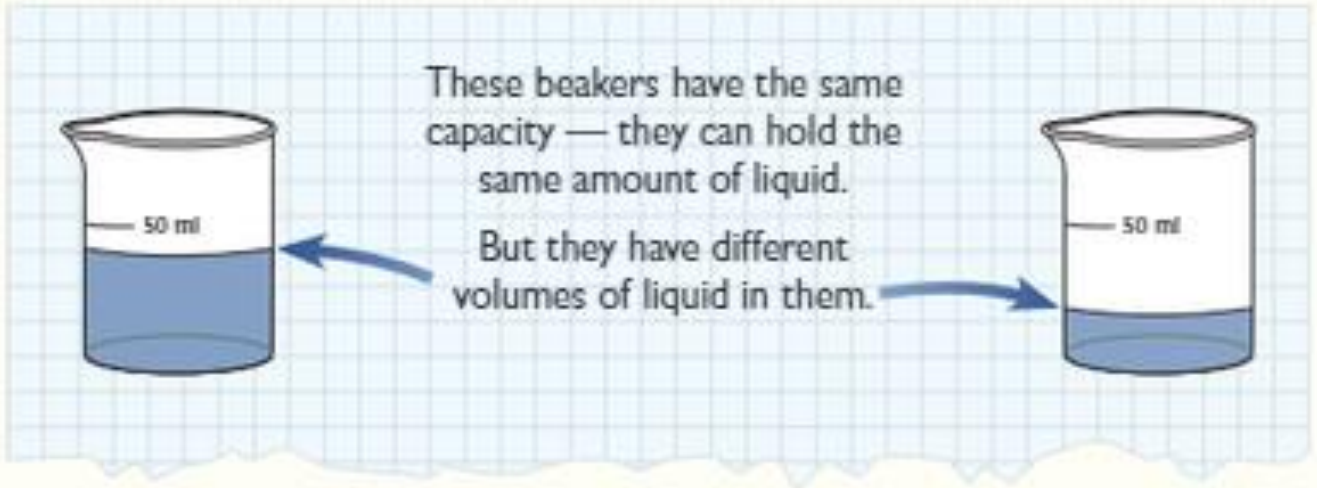
Capacity and Volume

Capacity and Volume CGP EL3 p.54

Volume and Capacity

Volume is the amount of space something takes up.

Capacity is how much something will hold.



Capacity and Volume CGP EL3 p.54

EXAMPLE 1:

Jodie showers twice a day. Each shower uses about 45 litres of water. How much water does Jodie use showering each week?

Each day Jodie uses: 45 litres × 2 = 90 litres of water

In a week, Jodie uses 7 times this amount: 90 litres × 7 = 630 litres

So Jodie uses **630 litres** of water for showering each week.

Practice Questions CGP EL3 p.56

1) Charlie is having a new hot water tank fitted in his guest house.
He wants it to have a capacity of over 160 L.

Hot water tank	Capacity
Duchess XL	150 L
Herald 175	175 L
Issigo ZF	130 L
AEB 224	165 L

Which of the tanks in the table above could he have fitted?

.....

2) Sue wants to buy a small bottle of shampoo to take on holiday. The bottle can have a maximum capacity of 100 ml. She finds 3 bottles in the shop: 85 ml, 125 ml and 50 ml.

Sue wants to buy the biggest bottle she can. Which one should she buy?

.....

Game: Capacity Quiz


02 :00

Game: Capacity Quiz

What was your score?

United Nations Sustainable Development Goals

6 CLEAN WATER AND SANITATION

ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

SAFE DRINKING WATER, SANITATION AND HYGIENE

STILL OUT OF REACH

FOR BILLIONS

IN 2022

2.2 BILLION PEOPLE LACKED SAFELY MANAGED DRINKING WATER

3.5 BILLION PEOPLE LACKED SAFELY MANAGED SANITATION

2.2 BILLION PEOPLE LACKED BASIC HAND WASHING FACILITIES

TO MEET 2030 TARGETS, PACE OF PROGRESS WILL HAVE TO ACCELERATE

- 6x DRINKING WATER
- 5x FOR SANITATION
- 3x HYGIENE

2.4 BILLION PEOPLE LIVE IN WATER-STRESSED COUNTRIES (2020)

81% OF SPECIES DEPENDENT ON INLAND WETLANDS HAVE DECLINED SINCE 1970

INTEGRATED WATER-RESOURCES-MANAGEMENT IMPLEMENTATION NEEDS ACCELERATION

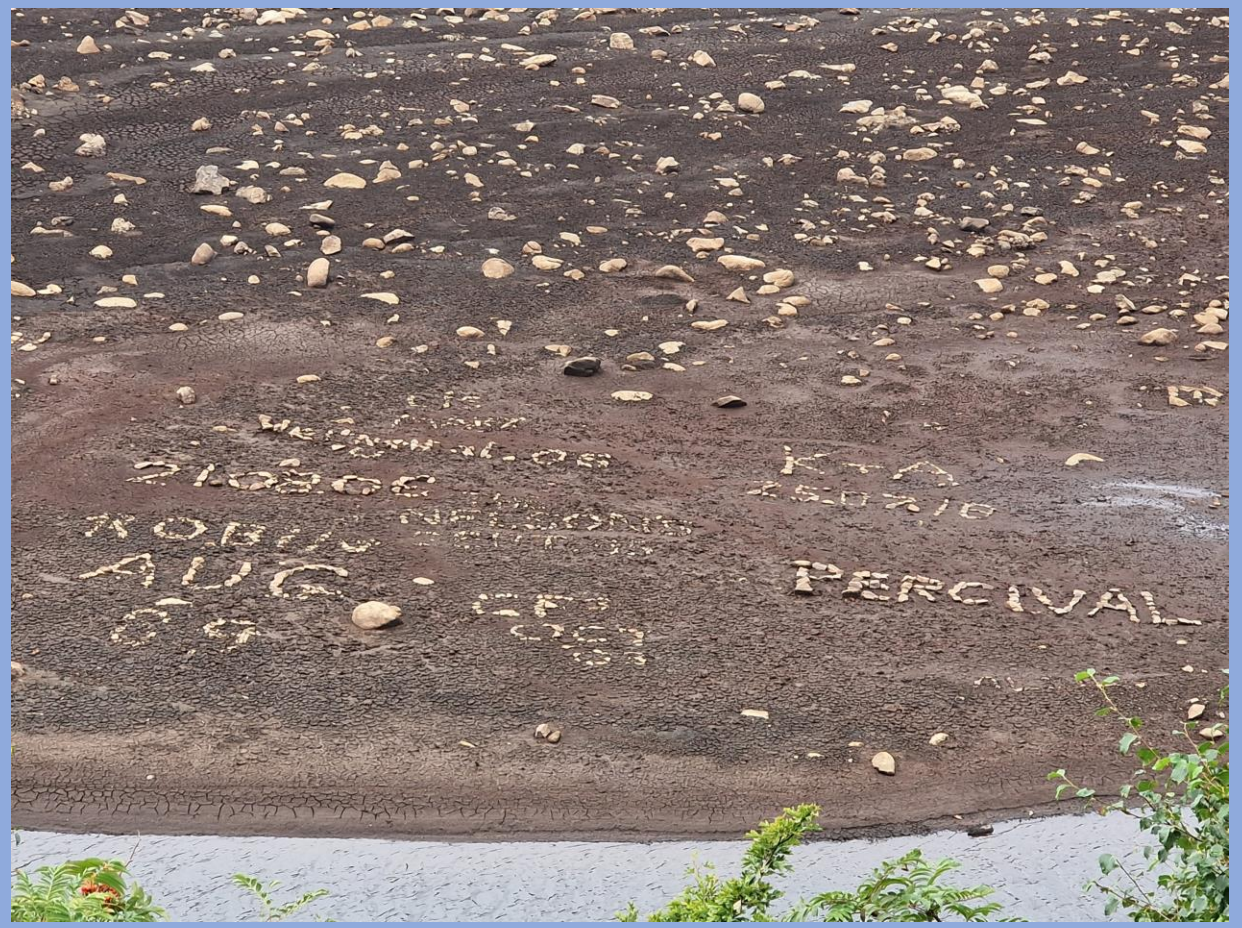
NUMBER OF COUNTRIES PER PROGRESS LEVEL

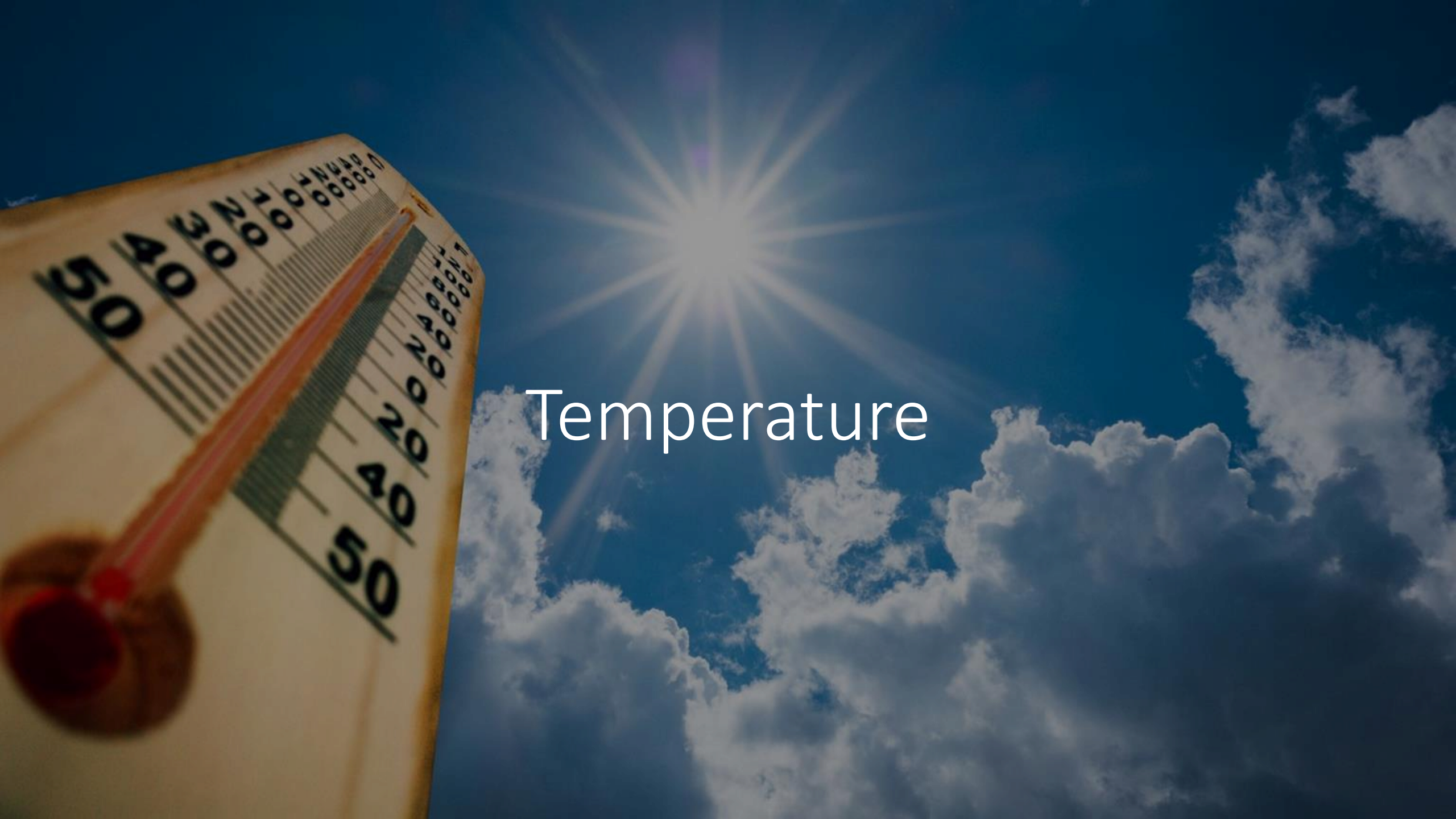
https://www.youtube.com/watch?v=Sw6Jnzzq3zg

Meldon Reservoir – Summer 2022 (Drought)

Meldon Reservoir – Summer 2022 (Drought)

Meldon Reservoir – Summer 2022 (Drought)




Temperature

Temperature CGP EL3 p.57

Temperature is How Hot or Cold it is

1) Temperature is a number that shows how hot or cold something is.
2) An object with a high temperature is warm or hot. For example, the inside of an oven.
3) An object with a low temperature is cool or cold. For example, the inside of a fridge.
4) Temperature can have different units.
   The most common are called degrees Celsius (°C).

- The temperature in a normal oven can reach around 230 °C.
- The temperature on a summer's day in the UK might be 26 °C.
- The temperature in a fridge is usually around 5 °C.
- Water turns to ice at 0 °C.

Temperature CGP EL3 p.57

Calculations Involving Temperature

You might be asked to work out the difference between two temperatures.

EXAMPLE 1:

The temperature today is 17 °C.
Yesterday the temperature was 14 °C.

What is the difference in temperature between today and yesterday?

To find the difference, subtract the smaller temperature from the larger one.

17 °C – 14 °C = 3 °C

So the difference in temperature is **3 °C**.

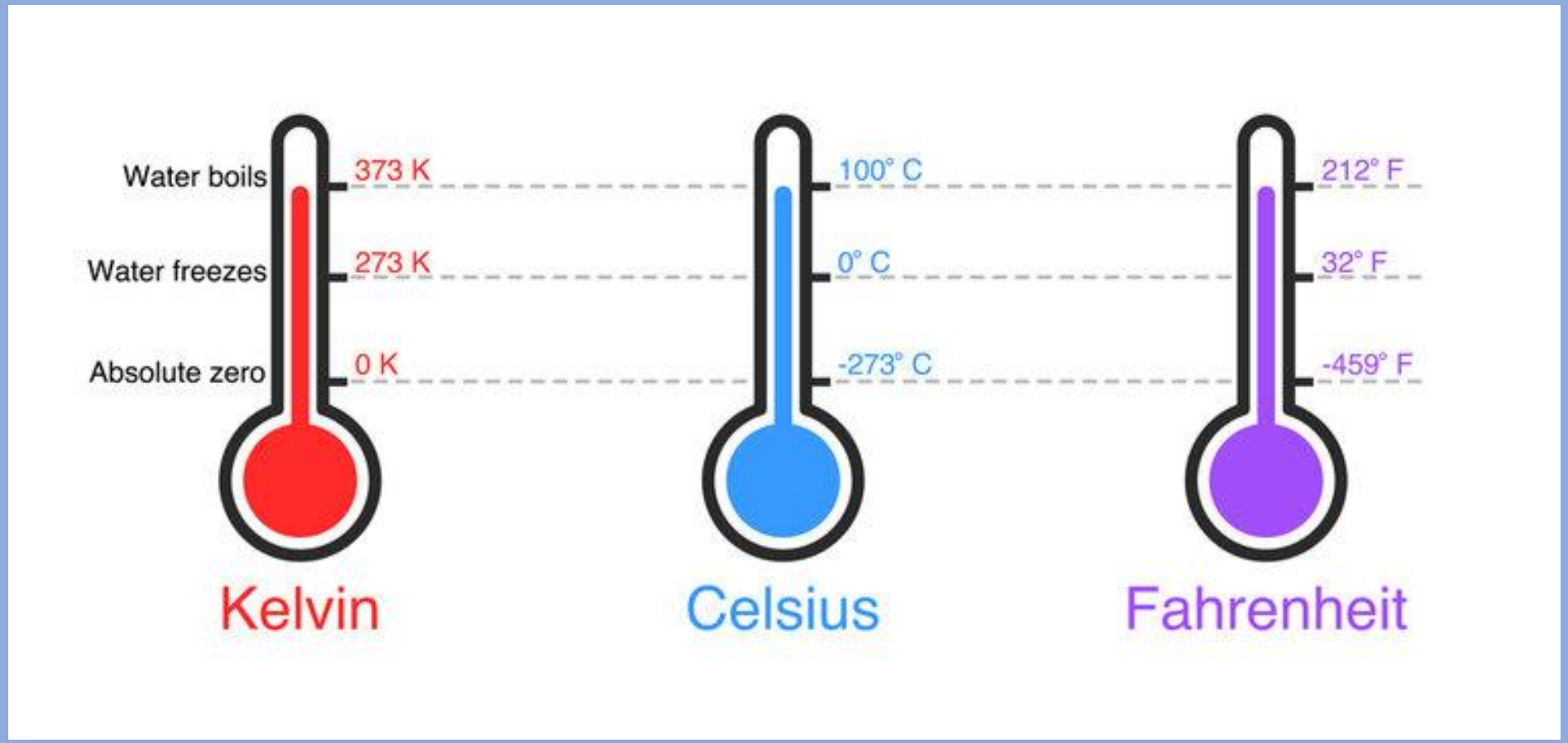
Game: Thermometer Readings


02 :00

Game: Thermometer Readings

What was your score?

Temperature Scales: Kelvin, Celsius, Fahrenheit



Video: Absolute Zero

Reading Scales

Activity: Reading Scales

Hints:

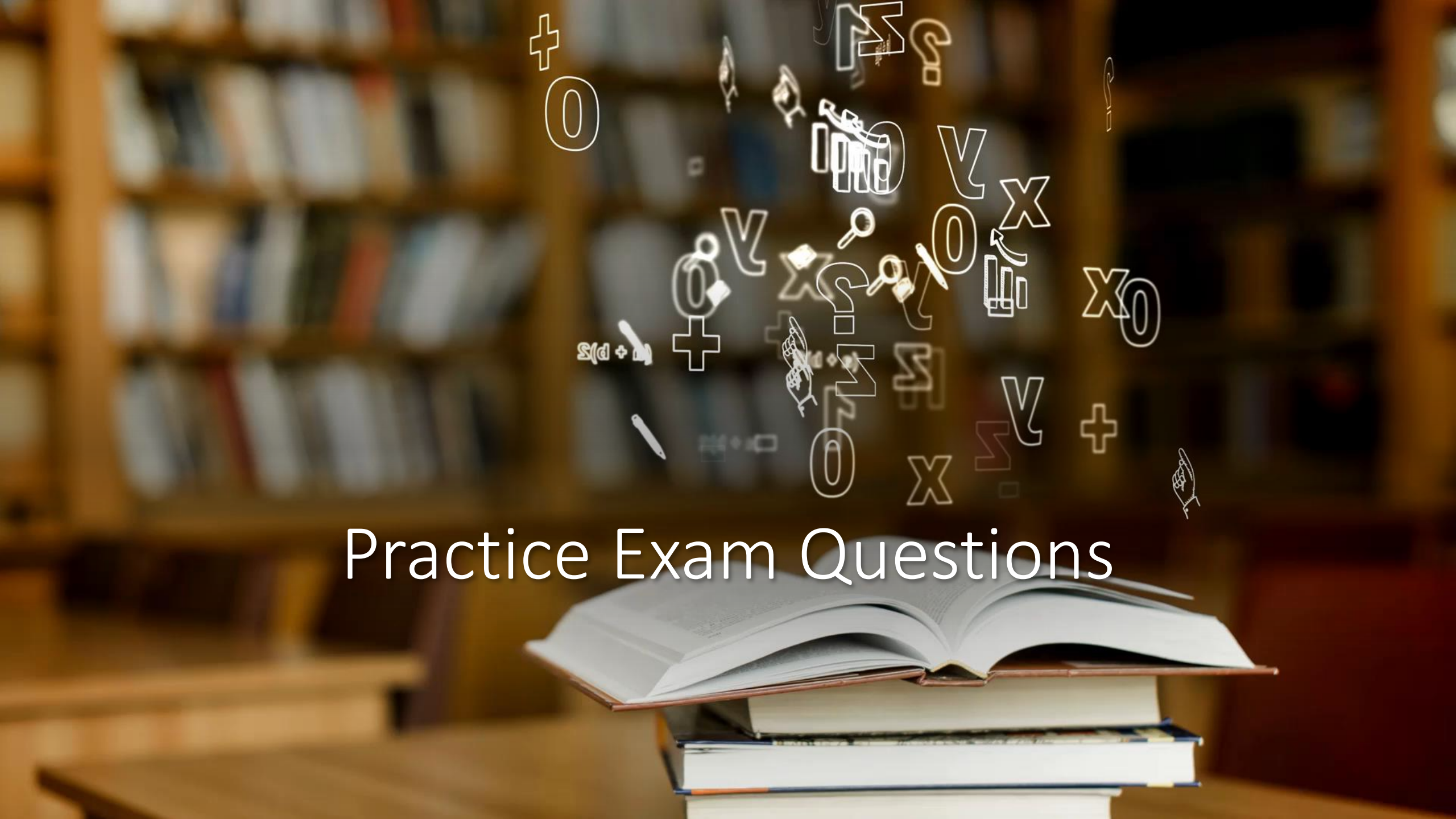
<u>Read the scales carefully.</u>

Some scales may say x 1000
So if it reads 1.5, the answer would be 1500.


02 :00

Activity: Reading Scales

What was your score?



Practice Exam Questions

Always Read the Question

And always re-read the questions at the end.

L1 Past Paper – Non-Calculator - Weight

3 (d) Simon has a luggage allowance of 23 kg

He has already packed 18 400 g

How many more **kg** can he pack?

[2 marks]

Your answer:

kg

L1 Past Paper Non-Calculator Capacity

1 (a) Dennis thinks he is spending too much money on fuel for his car.

He uses this formula to work out how much fuel in **litres** he uses in a year.

Fuel used in litres	=	Distance travelled in miles	×	4.5	÷	Miles per gallon

Last year he travelled 10 000 miles.

His car did 40 miles **per gallon**.

How many **litres** of fuel did Dennis use last year?

[3 marks]

Your answer: **litres**

L1 Past Paper – Non-Calculator - Temperature

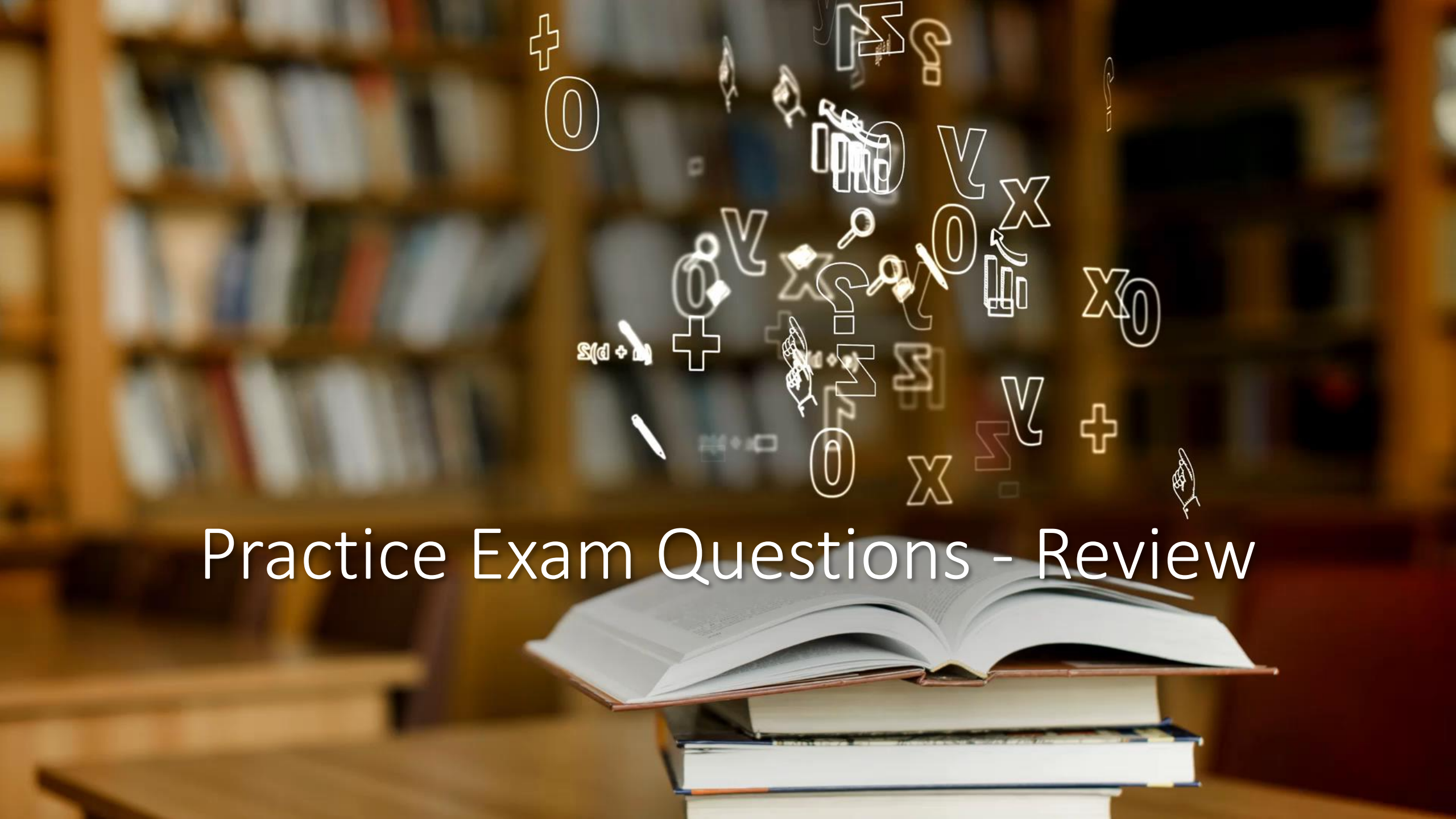
1 (f) When Don arrives in Fort William

- the temperature at the bottom of Ben Nevis is 3 °C
- the temperature at the top of Ben Nevis is –6 °C

Calculate the difference in temperature between the top and bottom of Ben Nevis.

[2 marks]

Your answer: **degrees**



Practice Exam Questions - Review

L1 Past Paper – Non-Calculator - Weight

3 (d) Simon has a luggage allowance of 23 kg

He has already packed 18 400 g

How many more **kg** can he pack?

[2 marks]

$23 - 18.4 = 4.6$

Your answer: 4.6 **kg**

L1 Past Paper Non-Calculator Capacity

1 (a) Dennis thinks he is spending too much money on fuel for his car.

He uses this formula to work out how much fuel in **litres** he uses in a year.

Fuel used in litres	=	Distance travelled in miles	×	4.5	÷	Miles per gallon

Last year he travelled 10 000 miles.

His car did 40 miles **per gallon**.

How many **litres** of fuel did Dennis use last year?

[3 marks]

$10,000 \times 4.5$

$= 45,000$

$40 \overline{)45,000}$

1125

Your answer: 1125 **litres**

L1 Past Paper – Non-Calculator - Temperature

1 (f) When Don arrives in Fort William

- the temperature at the bottom of Ben Nevis is 3 °C
- the temperature at the top of Ben Nevis is –6 °C

Calculate the difference in temperature between the top and bottom of Ben Nevis.

[2 marks]

$3 - (-6) = 9$

Your answer: 9 **degrees**

Private Study

Entry Level 3 Students: Read through pages 51 - 61 of your CGP textbook, answering all questions as you go.

Level 1 Students: Read through pages 52 - 59 of your CGP textbook, answering all questions as you go.

Level 2 Students: Read through pages 62 - 69 of your CGP textbook, answering all questions as you go.

Don’t worry if you don’t finish, just do as much as you can.

If you need help, ask one of the staff.

End of Part One

12

Part Two

Take 5 minutes for yourself…

Section 2: Measure, Shape & Space
Part 2: Time

Time

Time

NOUN the indefinite continued progress of existence and events in the past, present, and future regarded as a whole.

From the Old English, of Germanic origin, ‘tima’ – related to tide

Game: Analogue Time


04:59

Game: Analogue Time

What was your score?

Time: Units (CGP EL3 p.37)

Time Has Lots of Different Units

You need to be able to use lots of different units for time. You also need to be able to change between them. Here are how some of the units of time are related:

60 seconds = 1 minute	7 days = 1 week	10 years = 1 decade
60 minutes = 1 hour	365 days = 1 year	100 years = 1 century
24 hours = 1 day	12 months = 1 year	

15 minutes = a quarter of an hour

30 minutes = half an hour

45 minutes = three quarters of an hour

Time: Units (CGP EL3 p.37)

EXAMPLES:

1) How many seconds are there in 2 minutes?

   There are 60 seconds in 1 minute, so to find out how many seconds there are in 2 minutes, you need to multiply 60 by 2:

   $$60 \times 2 = \textbf{120 seconds}$$

2) How many days is 48 hours?

   1 day is the same as 24 hours, so to find out how many days there are in 48 hours, you need to divide 48 by 24:

   $$48 \div 24 = \textbf{2 days}$$

Time: Practice Questions (CGP EL3 p.37)

Practice Questions

1) How many minutes are there in an hour and a half? .....

2) How many months are there in 2 years? .....

3) How many days are there in 3 weeks?

.....

Time: 12 and 24 hour Clock (CGP EL3 p.38)

The 12-Hour Clock and the 24-Hour Clock

1) You can give the time using the 12-hour clock or the 24-hour clock.

2) The 24-hour clock goes from 00:00 (midnight) to 23:59 (one minute before the next midnight).

06:00 is 6 o'clock in the morning. 18:00 is 6 o'clock in the evening.

3) The 12-hour clock goes from 12:00 am (midnight) to 11:59 am (one minute before noon), and then from 12:00 pm (noon) till 11:59 pm (one minute before midnight).

2:00 am is 2 o'clock in the morning. 2:00 pm is 2 o'clock in the afternoon.

4) For times in the afternoon, you need to add 12 hours to go from the 12-hour clock to the 24-hour clock. Take away 12 hours to go from the 24-hour clock to the 12-hour clock.

Time: 12 and 24 hour Clock (CGP EL3 p.38)

Practice Questions

1) Change the times below from the 24-hour clock to the 12-hour clock.

a) 10:30 .....

b) 15:35 .....

2) Change the times below from the 12-hour clock to the 24-hour clock.

a) 7:10 pm .....

b) 5:20 am .....

3) Antony is meeting a friend at 9 pm. His watch reads 21:30 as he arrives. Is he late?

.....

4) A cinema is showing a film at these times: 18:55, 19:40, 20:10, 20:40 and 21:25.
Sasha gets to the cinema at 8:05 pm. What is the earliest film she can watch?

.....

Time: Digital and Analogue (CGP EL3 p.39)

Reading Time from a Digital Clock

A digital clock displays time using the 24-hour clock.

08:23 = 08:23 (am) 11:59 = 11:59 (am) 23:47 = 23:47 (11:47 pm)

Reading Time from an Analogue Clock

An analogue clock displays time using the 12-hour clock.

1) The small hand shows the hour.
2) The big hand shows how many minutes past the hour.
   - It points to 12 on the hour (0 minutes past).
   - Every gap is another 5 minutes.

For example, if the big hand is at 3, then it's 3 × 5 = 15 minutes past.

This is 10:15. An analogue clock doesn't tell you if it's am or pm.

At 2:00 (or "2 o'clock") the small hand is at 2. The big hand is at 12.

At 2:15 (or "quarter past 2") the small hand is just after 2. The big hand is at 3.
3 × 5 = 15 minutes past.

Time: Duration (CGP EL3 p.40)

Working Out Lengths of Time

To work out how long something took, break it into parts.

EXAMPLE:

Nisha set off on a bike ride at 10:30 am and had a break at 12:25 pm.
How long had she been riding for?

10:30 am —30 mins→ 11:00 am —1 hour→ 12:00 pm —25 mins→ 12:25 pm

Add up the hours and minutes separately: 1 hour
30 mins + 25 mins = 55 mins

So she was riding for **1 hour and 55 mins**.

Time: Timetables (CGP EL3 p.42)

Timetables Have Information About When Things Happen

1) Timetables have columns and rows.
2) Columns are the strips that go up and down.
   Rows are the strips that go across.
3) There are lots of different types of timetables —
   the best way to learn how to use them is to practise.

There's more about tables on page 75.

EXAMPLE 1:

The timetable below shows train times.
What time would you need to leave Preston to get to Deansgate for 12:30?

Preston	10:32	11:02	11:33	12:02
Buckshaw Parkway	10:44	11:14	11:45	12:14
Bolton	11:09	11:40	12:10	12:40
Deansgate	11:27	12:07	12:29	13:07

1) Find Deansgate in the timetable.
2) Follow that row until you reach the last time before 12:30. It's 12:29.
3) Go up the column till you reach the Preston row —
   this is the leaving time from Preston.
4) So you'd need to leave Preston at **11:33**.

Time: Practice Questions (CGP EL3 p.43)

Practice Questions

1) Debbie wants to travel by train from St David's to Topsham.

a) If she wants to get there by 17:30, which train should she catch?

.....

St David's	16:25	16:55	17:25
St James Park	16:29	17:01	17:29
Digby	16:33	17:07	17:33
Topsham	16:39	17:13	17:39

b) She now needs to be there by 17:15 instead. Can she catch the same train from St David's?

.....

2) Liam is going on a one day training course. His timetable for the day is shown below.

a) What time does 'Reptile Care' start?

.....

b) How long is 'Large Animal Care'?

.....

c) Which is longer — morning break or afternoon break?

.....

Time	Activity
09:00 – 10:45	Introduction
10:45 – 11:00	Morning Break
11:00 – 12:45	Large Animal Care
12:45 – 13:30	Lunch
13:30 – 15:00	Reptile Care
15:00 – 15:30	Afternoon Break
15:30 – 17:00	Marine Animal Care

Time: Calendars (CGP EL3 p.44)

Working Out Dates Using a Calendar

You might be asked questions where you need to look at calendars and work out dates.

EXAMPLE:

Karen wants to go on holiday with her sister Ruth for a weekend in May. The calender shows the cost of flights.

(A weekend is Saturday to Sunday.)

- Karen can't go between the 1st and the 8th of May.
- Ruth can't go between the 25th and 31st of May.

MAY

MON	TUES	WED	THURS	FRI	SAT	SUN
		1	2	3	4 £78	5
6	7	8	9	10	11 £142	12
13	14	15	16	17	18 £112	19
20	21	22	23	24	25 £96	26
27	28	29	30	31		

What is the cheapest weekend that the sisters could go on holiday together?

1) First, cross out any dates when the sisters can't go.
2) Next, look for a weekend when both sisters are available.

MAY

MON	TUES	WED	THURS	FRI	SAT	SUN
		~~1~~	~~2~~	~~3~~	~~4~~ £78	~~5~~
~~6~~	~~7~~	~~8~~	9	10	11 £142	12
13	14	15	16	17	18 £112	19
20	21	22	23	24	~~25~~ £96	~~26~~
~~27~~	~~28~~	~~29~~	~~30~~	~~31~~		

So the sisters could go on holiday on either the 11th-12th or 18th-19th.

The cheapest is the **18th-19th**.

Time: Practice Questions (CGP EL3 p.44)

Practice Question

1) Chidi wants to book a driving test in May.

Driving tests cost £62 on weekdays (Monday-Friday) and £75 on Saturdays.

The test centre is closed on Sundays, and on the bank holidays on the 6th and 27th of May.

Chidi works Tuesday-Friday every week, so he can't do the test on those days.

MAY

MON	TUES	WED	THURS	FRI	SAT	SUN
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Write down the date and cost of the driving test if Chidi books:

a) the last possible test he can take in May,

.....

b) the cheapest test in May at the first possible date.

.....

Video: Making Cornish Pasties

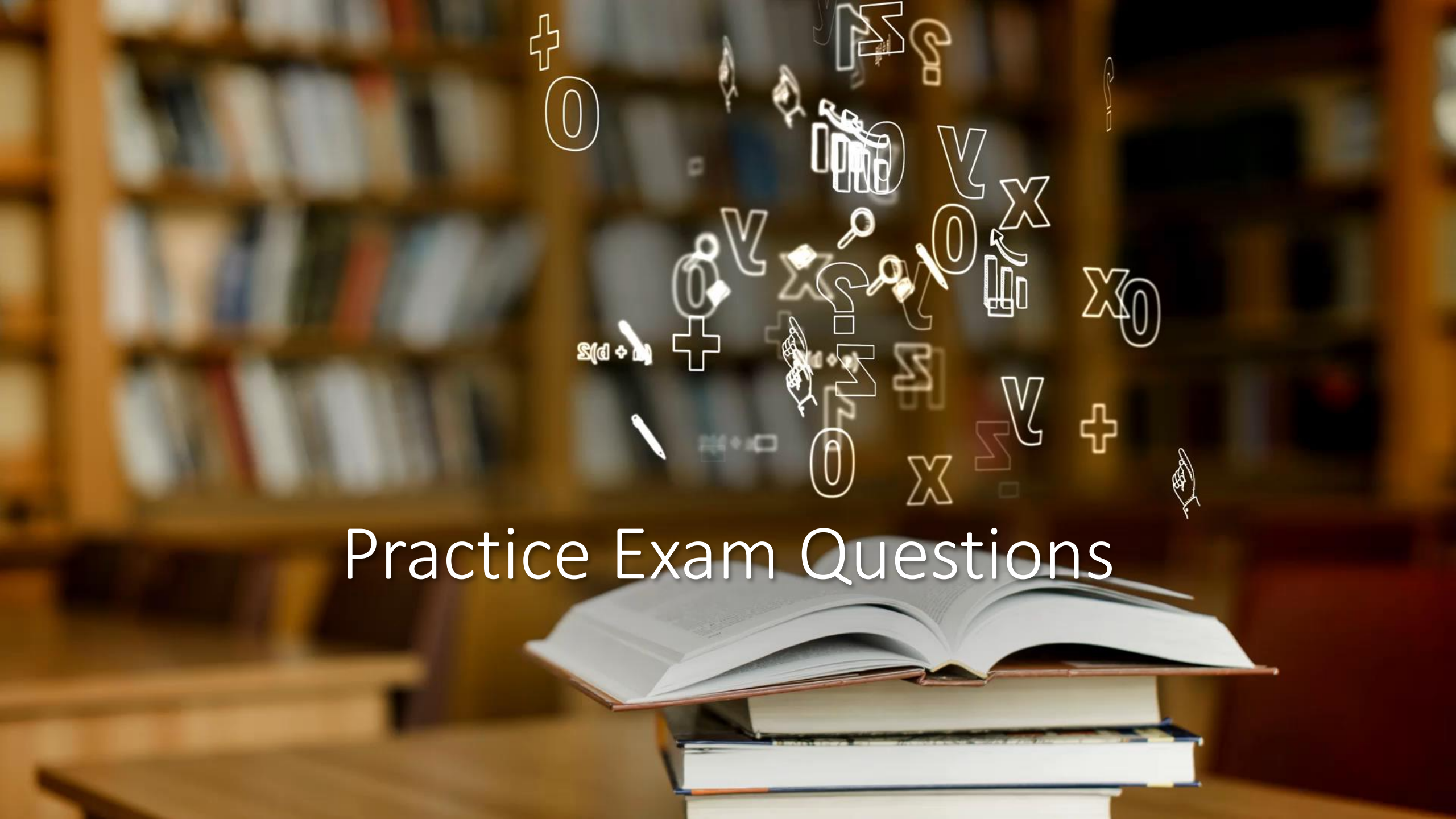
https://www.youtube.com/watch?v=7rXTQPIizYg

- You are about to watch a video that shows you how to make a Cornish Pasty.
- Note down the weights of the ingredients.
- Note down the volumes of liquids.
- Note the temperature of the oven.
- Note the time taken to bake.


https://www.youtube.com/watch?v=7rXTQPIizYg

How to start an argument in Cornwall…

What is this?



Practice Exam Questions

Always Read the Question

And always re-read the questions at the end.

L1 Past Paper – Non-Calculator – Time (hrs/mins)

1 (b) Don lives in London.

He wants to travel to Fort William in Scotland.

Don finds this information about travel times.

Travel times between London and Fort William

Night bus	14 hours 11 minutes
Drive	8 hours 42 minutes
Fly	6 hours 31 minutes

How much longer does it take to travel by the night bus than to fly?

[1 mark]

Your answer:

L1 Past Paper – Non-Calculator – Time (years)

1 (a) Don spends his holidays climbing mountains.

The twenty highest mountains in the UK are all in Scotland.

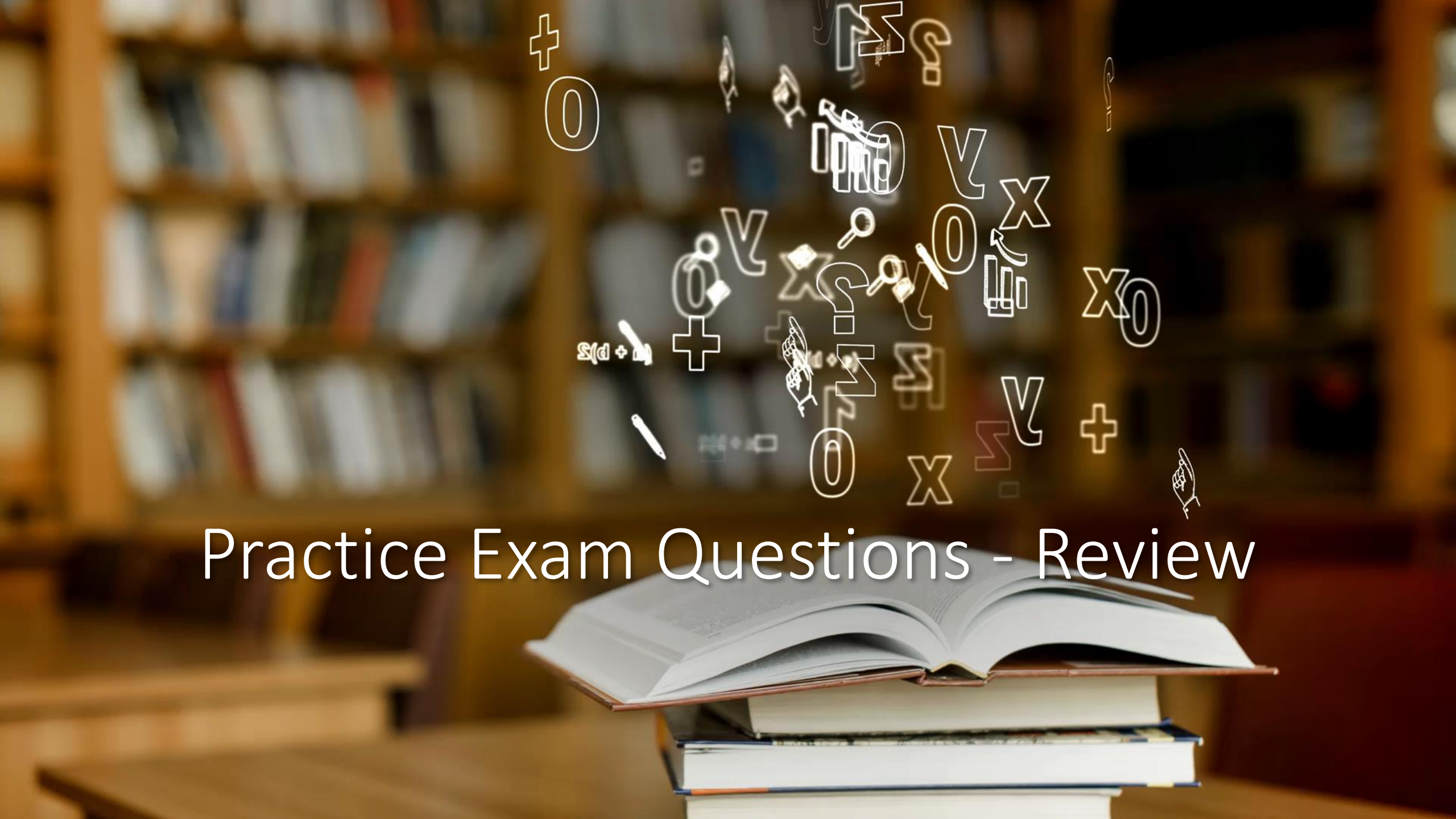
Don began climbing these mountains in 2011.

He climbed 4 of these mountains each year.

In which year did he finish climbing the twenty highest mountains?

[2 marks]

Your answer:



Practice Exam Questions - Review

Private Study

Entry Level 3 Students: Read through pages 37-44 of your CGP textbook, answering all questions as you go.

Level 1 Students: Read through pages 56 - 59 of your CGP textbook, answering all questions as you go.

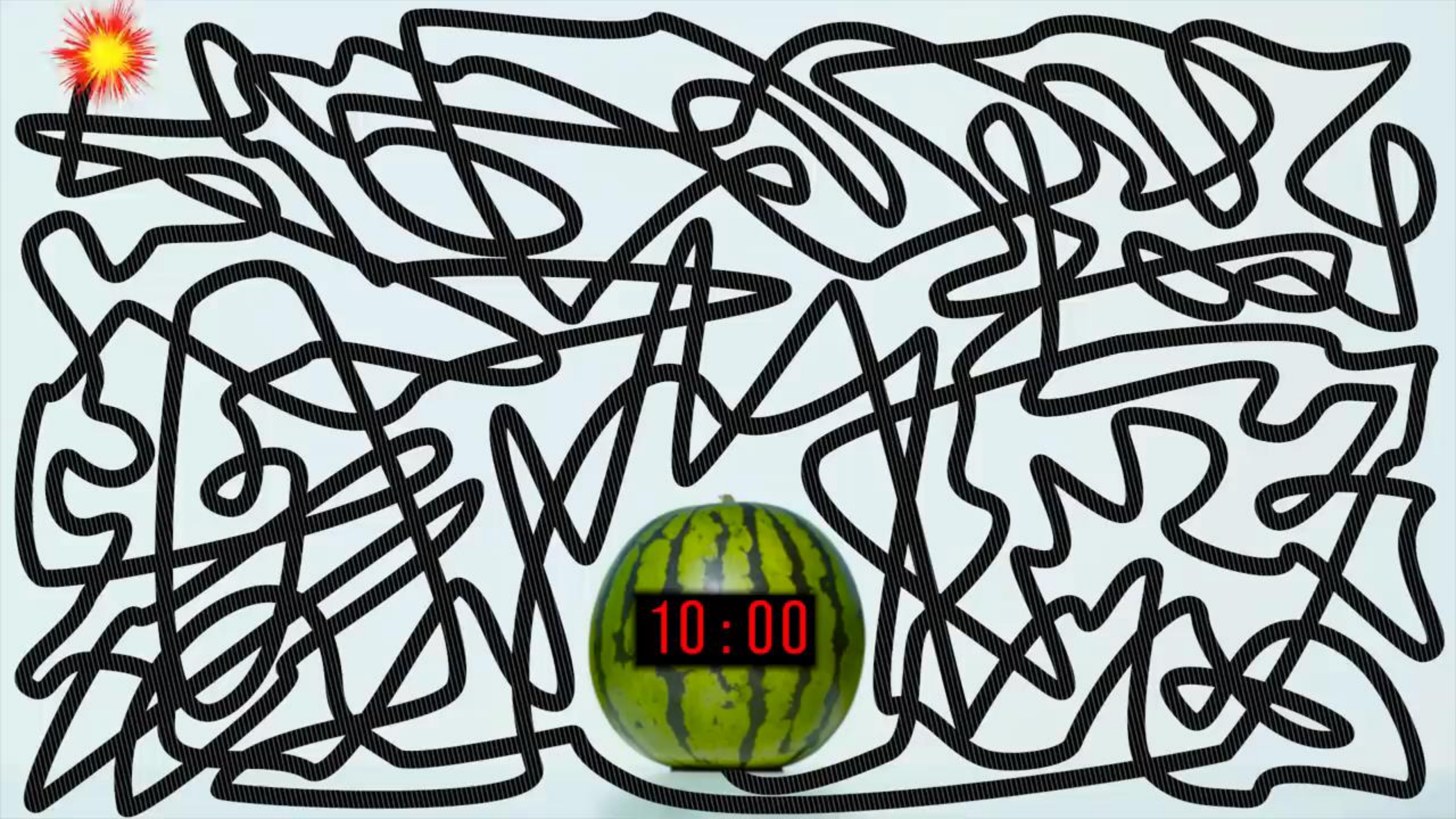
Level 2 Students: Read through pages 62 - 70 of your CGP textbook, answering all questions as you go.

Don’t worry if you don’t finish, just do as much as you can.

If you need help, ask one of the staff.

Revision Q and A:

- Some of us may have missed lessons for a variety of reasons.
- If there are gaps in your CGP textbook for Unit 1: Number. Please work through these and ask staff for help if needed.
- Start at the beginning of Unit 1 and work forward completing gaps.
- If you are concerned that you are behind, don't forget that all of the resources are available online.
- Click on: www.reachoutcf.com/maths-resources
- Here you will find all of the lesson PowerPoint presentations. Please note the videos will not play onscreen but you can click on the links.


10 : 00

My Skills Forward

- If you have completed all questions in your textbook, let's now look at NCFE My Skills Forward.
- Grab a laptop and visit the following link:

https://www.myskillsforward.co.uk

- Your login details are:

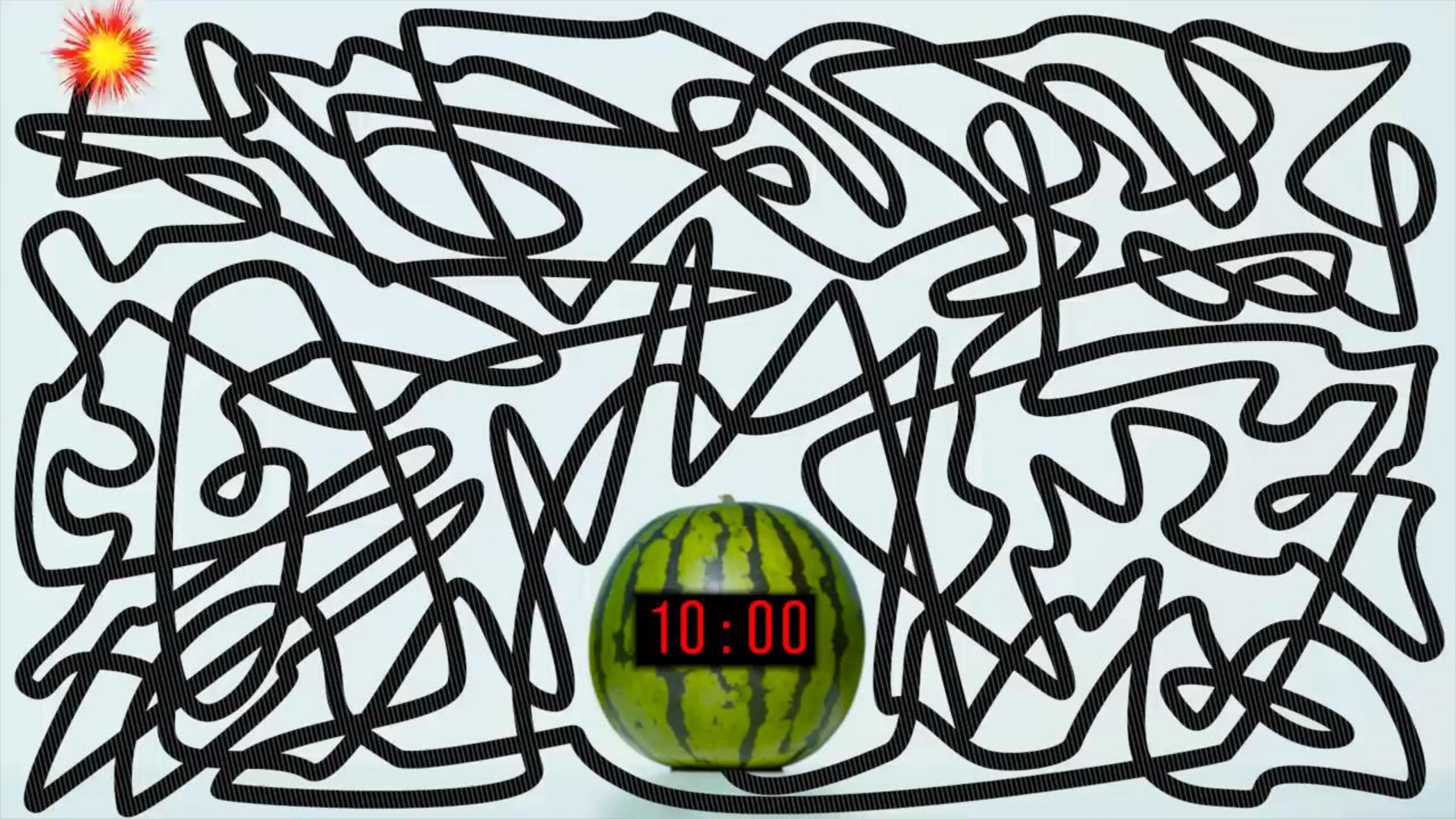
  Username: Your full name with no spaces

  Password: Letmein1

- Starts at the beginning of Section 1: Number and work through the exercises.
- Please ask for help where needed and let me know if there are areas in this section that you would like to revise.


02 :00


04:59


10 : 00

Your partner is Evil!

We all know that our partners are the product of time and money (particularly when dating!). Mathematically, a product is another way of saying multiplication.

Partner = Time x Money

We all know that Time is Money. Time = Money

Partner = Money x Money = $Money^2$

You may have heard that Money is the root of all Evil. Money = $\sqrt{Evil}$

Therefore: **Partner = $(\sqrt{Evil})^2$ = Evil**