

Monday (p4)

Look at the table carefully with an adult.



| Planet | Number of moons | Year length (Earth days/years) | Day length (Earth hours\days) | *Diameter (miles) | Temperature | |
|---------|-----------------|--------------------------------|-------------------------------|-------------------|-------------|-----------|
| | | | | | Max. (°C) | Min. (°C) |
| Mercury | 0 | 88 days | 59 days | 3031 | 430 | -184 |
| Venus | 0 | 225 days | 243 days | 7521 | 464 | 464 |
| Earth | 1 | 365 days | 24 hours | 7926 | 57 | -89 |
| Mars | 2 | 687 days | 24.6 hours | 4222 | 20 | -120 |
| Jupiter | 67 | 11.9 years | 9.8 hours | 88729 | -110 | -110 |
| Saturn | 62 | 29.5 years | 10.2 hours | 74 600 | -140 | -140 |
| Uranus | 27 | 84.1 years | 17.9 hours | 32 600 | -197 | -197 |
| Neptune | 13 | 164.8 years | 19.1 hours | 30 200 | -204 | -204 |

*The diameter of a planet is a straight line from one side to the opposite side passing through the centre of the planet.

Use the table to answer the questions below.

A

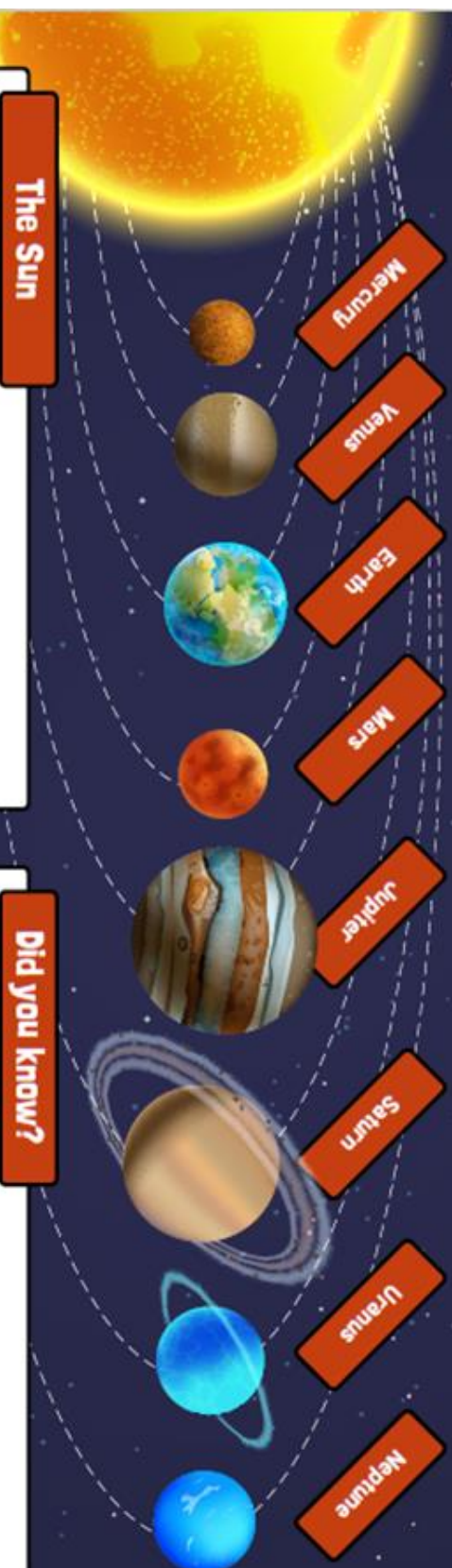
- 1 How many moons does Mars have?
- 2 How long is a year on Mercury?
- 3 What is the diameter of the Earth?
- 4 What is the temperature on Saturn?
- 5 How long is a day on Uranus?
- 6 Which planet has a maximum temperature of 20°C?
- 7 Which planet has 67 moons?
- 8 Which planet has a year 29.5 years long?
- 9 Which planet has a diameter of 30 200 miles?
- 10 Which planet has a day 59 times longer than a day on Earth?



The Planets Knowledge Organiser

Science

In our Solar System, there are 8 planets. They all orbit The Sun which sits in the centre. The planets closest to The Sun are the hottest and the planets furthest away are coldest. Our planet, Earth, is just the right temperature for life. Earth is the only planet in our Solar System that has life.



The Sun

The Sun is not a planet! It is a star. It is at the centre of our Solar System and gives light and heat to all the planets in it. It also has a gravitational pull that keeps all the planets in orbit around it.

Did you know?

There used to be 9 planets in our Solar System. There was a planet called Pluto that was even further away than Neptune. Pluto used to be a planet until scientists deemed it 'too small' as some of the other planets' moons were bigger than it. It is now categorised as a dwarf planet instead.

Orbits

All the planets in our Solar System orbit the sun. The Sun is at the centre of our Solar System. Each planet takes a different amount of time to orbit The Sun depending on how far away it is and how slowly it moves. Planets orbit The Sun because of gravity. The Sun's gravitational pull keeps all the planets in orbit. Planets travel on an elliptical path around The Sun, which keeps them from falling into The Sun. Below is a table which shows how long it takes each planet to orbit The Sun.

| | |
|---------|----------------------|
| Mercury | 87.97 Earth Days |
| Venus | 224.70 Earth Days |
| Earth | 365.25 Earth Days |
| Mars | 686.98 Earth Days |
| Jupiter | 4332.82 Earth Days |
| Saturn | 10,755.70 Earth Days |
| Uranus | 30,687.15 Earth Days |
| Neptune | 60,190.03 Earth Days |

Did you know?

People used to think the Earth was flat! Around 350bc, a scientist named Aristotle provided evidence that it was actually a sphere.

Key Vocabulary

dwarf planet – a small planet
friction – the force that acts upon one surface when it moves against another
gravity – a pull force that acts at a distance
orbit – the curved path around a star, planet or moon
planet – an object in space that orbits a star
pull – to move something towards
push – to move something away
Solar System – the name given to our sun and 8 planets and their moons
star – an object in space made of luminous plasma (bright gas) held together by its own gravity

MOONS

We are not the only planet with a moon.
Some planets have more moons than us!
Mercury and Venus – 0 moons
Earth – 1 moon
Mars – 2 moons
Jupiter – 79 moons
Saturn – 82 moons
Uranus – 27 moons
Neptune – 14 moons



Tuesday P7

B

Look at the table on page 138.

- 1 Which planets are moonless?
- 2 In the table year lengths are rounded to the nearest whole day. Give the actual length of Earth's year correct to 2 decimal places.
- 3 Which planet is closest to the Earth:
 - a) in size (diameter)
 - b) in length of day
 - c) in length of year?
- 4 Which planet is:
 - a) furthest from the Sun
 - b) closest to the Sun?



- 5 Which planet is:
 - a) coldest
 - b) hottest?
- 6 Which planet has:
 - a) the longest day
 - b) the shortest day?
- 7 Which two planets have a diameter approximately four times that of Earth?
- 8 What is the difference between the maximum and minimum temperatures:
 - a) on Mercury
 - b) on Earth
 - c) on Mars?
- 9 How many planets have:
 - a) a shorter year than Earth
 - b) a shorter day than Earth?

VOCABULARY LABORATORY

Explain meaning / Definition:

Use in a sentence (add picture too):

Modification:

Modify to past tense, present, plural singular, add prefix or suffix etc.
How many forms can you think of?

Synonyms

Antonyms



A t-shirt template with the following sections:

- Favorite Film
- If I were an animal.....
- My Favorite Sport
- Favorite Place
- Favorite Song
- Name
- Favorite Drink
- Age
- Grade
- Self Portrait
- Favorite Subject
- Favorite Fruit
- Favorite Color
- Favorite Vegetable
- Favorite Book

A smartphone screen displaying a form titled "All about Me".

All about Me

name _____
liked to be called _____
top goal _____
best hobby _____

| | | |
|-------------------|----------------|--------------|
| age | my family | best food |
| favorite animal | favorite color | best subject |
| dream destination | I love | I don't like |

A soccer ball template with the following sections:

- best book ever
- doodle lines here
- my name
- my age
- draw triangles here
- take a line for a walk
- self portrait
- favorite song
- birthday date
- draw squares here
- favorite sport
- favorite colour
- doodle here
- best food
- colour this

Summer Holiday Code Breaker

Solve the calculations and use the code breaker to spell out the summer-themed words.

| A | B | C | D | E | F | G | H | I | J | K | L | M |
|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 |

| N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
|----|----|----|----|---|---|---|---|---|---|---|---|---|
| 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

| | Answer | Letter |
|------------|--------|--------|
| 72 + 9 | | |
| Half of 12 | | |
| 27 - 14 | | |
| 100 - 81 | | |
| Double 13 | | |
| 700 + 100 | | |

| | Answer | Letter |
|------------|--------|--------|
| 50 - 32 | | |
| Half of 48 | | |
| 66 + 3 | | |

| | Answer | Letter |
|---------------------|--------|--------|
| 55 + 5 | | |
| 3 × 6 | | |
| 235 - 211 | | |
| 130 + 10 | | |
| 36 + 2 | | |
| 4 × 6 | | |
| 75 + 3 | | |
| 3 × 5 | | |
| 60 - 34 | | |
| 78 - 65 | | |
| 5 + 7 + 4 | | |
| $\frac{2}{3}$ of 33 | | |
| 49 + 7 | | |

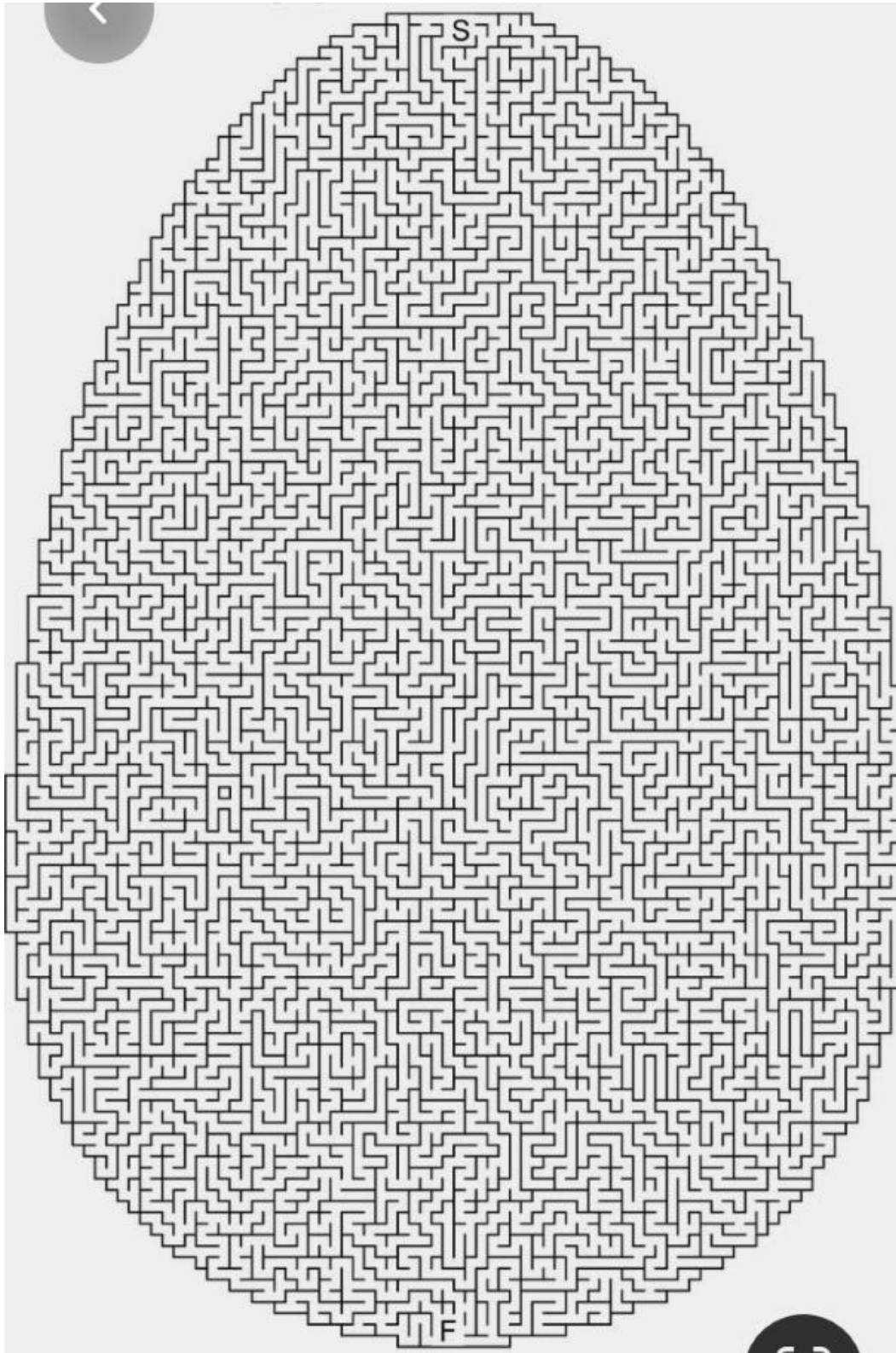
| | Answer | Letter |
|---------------------|--------|--------|
| 99 - 91 | | |
| 171 - 158 | | |
| 60 + 5 | | |
| 108 + 12 | | |
| $\frac{1}{2}$ of 20 | | |
| 7 + 8 + 7 | | |
| 45 + 3 | | |

| | Answer | Letter |
|---------------------|--------|--------|
| 3 × 7 | | |
| 2 × 9 | | |
| 48 + 6 | | |
| $\frac{1}{4}$ of 38 | | |
| 3 × 6 | | |
| 39 + 3 | | |
| 100 + 5 | | |
| 63 + 7 | | |
| 84 + 7 | | |
| 92 + 4 | | |



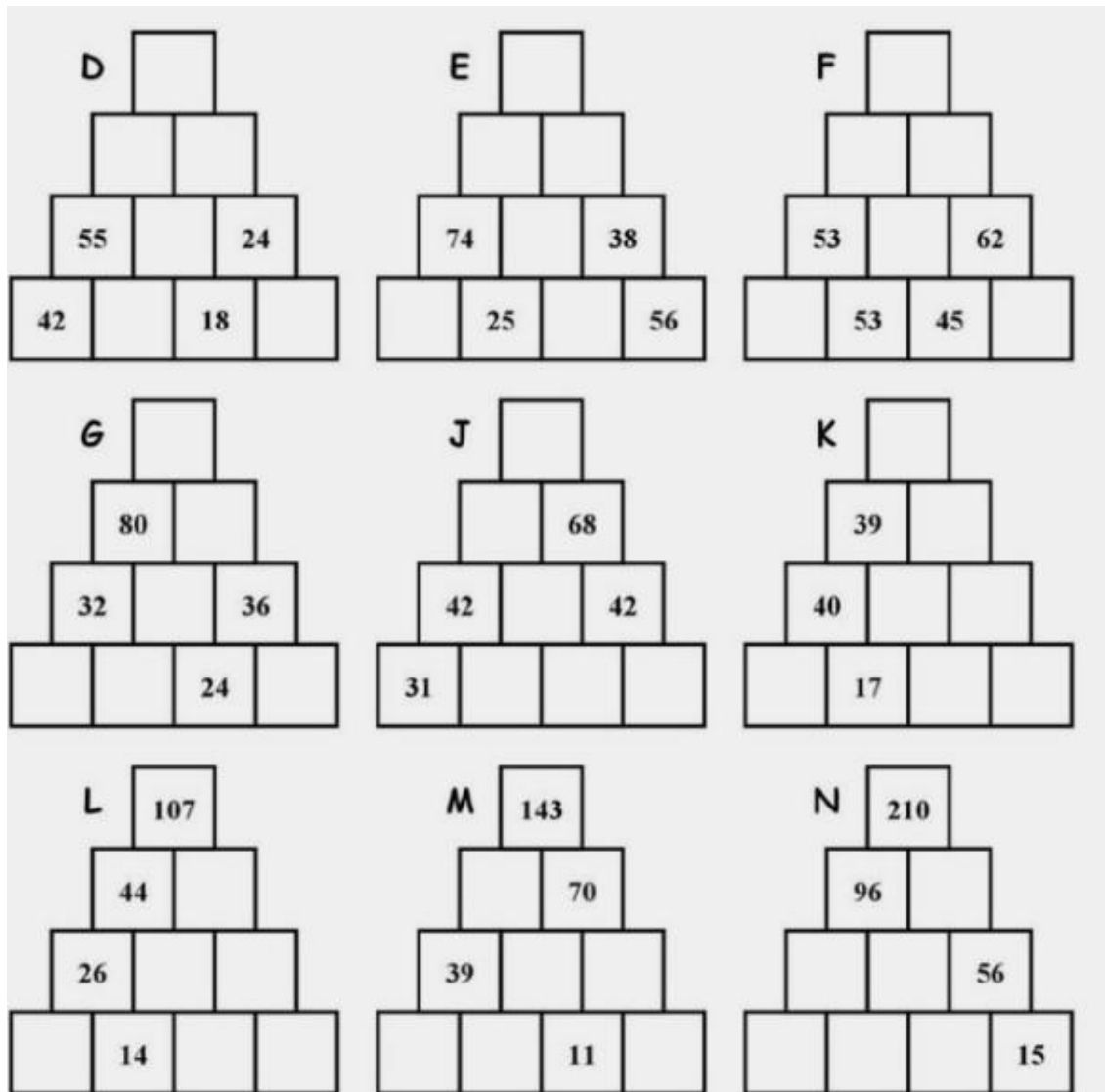
Thursday (p14-16)

Maths



Complete the maze from start (labelled S) to finish (labelled F) it will take patience, planning and persistence.

Solve the pyramid calculations.



Solve the crosscalculation – it is like a cross word but uses equations instead. Lots of fun!

| | | | | | | | | | | | |
|----|---|----|---|----|---|----|---|---|----|--|--|
| 12 | + | | = | 36 | | | | | | | |
| | | ÷ | | ÷ | | | | | + | | |
| | - | | = | 4 | | | | | 23 | | |
| x | | = | | = | | ÷ | | = | | | |
| | | 6 | | | x | 5 | = | | | | |
| = | | | | | | = | | | | | |
| 56 | | 20 | - | | = | 11 | | | 3 | | |
| | | + | | x | | | | | x | | |
| 84 | ÷ | | = | | | | | | 13 | | |
| | | = | | = | | | | | = | | |
| | | | | 63 | - | | = | | | | |

