## Each puzzle has a point rating 1-10 with 10 being the most difficult.

## *Puzzles

The answer for each puzzle is in the notes section of each slide. You may need to scroll down. Pictures are include on most slides. Some will help, others will lead you astray!


If you know the answer already, don't spoil it!

The puzzles are in 3 sections: general, maths and longer lateral thinking puzzles.

## General

Maths


## Lateral thinking



A brown house is made with brown bricks, a white house is made with white bricks. What is a green house made of?


You go on holiday to Norway. When you arrive at your cabin, you find that there is no heat or electricity. However there is wood in the fireplace, a wood-burning stove, a candle and an oil lamp. You search through your pack and find you only have one match. What should you light first?


What occurs once in a minute, once in a second, once in a month and once in a century but not at all in a year, an hour or a week?


Why won't a starving eskimo eat a penguin egg?


Sam is a bus driver. He drove 10 miles to the bus depot. He then drove 10 miles with an average of 16 passengers before driving 10 miles to the garage where the bus was serviced. The mileometer on the bus showed that 20 miles had been driven that day. Explain.

Mrs Penworthy's bungalow is decorated completely with her favourite colour - purple. She has purple walls, purple furniture and purple carpets. Why does she not have purple stairs?


Six buckets are placed in a row. The first 3 are full of water and the other 3 are empty. By moving only one bucket, how can you get an arrangement where it goes full, empty, full, empty, full, empty?


1


2


3


4


5


6

## 5 points

What 5 letter word has 1 consonant followed by 4 vowels? If you remove the vowels, the sound is not altered.


Where can I put my right hand where I can't put my left hand?


You are driving a bus. At the start of your journey, there are 6 people on the bus: Fred, Bert, Sam, Jane, Bertha and Orla. At the first stop, Fred and Bert get off while Susan and John get on. At the second stop Bertha gets off and Callum gets on. At the last stop everyone gets off. What is the name of the bus driver?


What 5 letter word becomes shorter when you add 2 letters to it?


The caretaker is raking leaves in the playgrounds. In the front playground, there are 7 piles of leaves and in the back playground, there are 3 piles of leaves. How many piles will he have when he puts them all together?

A village has 2 men who cut hair: Bert who is the only barber in "Hair today, gone tomorrow" and Fred who is the only barber in "Hair Peace."
Fred's hair is well cut whilst Bert looks like he has had a fight with a lawnmower. Who would you choose to cut your hair? Why?


A man flew from London to Chicago on Tuesday. He stayed for 2 days and then flew back to London on Tuesday. Explain.


## 5 points

Who played for both England and Germany at Wembley on the same day?


The first copy of this book was published in 1878 in America. Since then it has been reprinted many times. American copies of this book are completely different from British ones. Branches of WH Smiths will have this book but won't sell it to you and libraries will have a copy but won't lend it to you. There is probably a copy in your home. What is the book?

England are leading Germany 4-1 in an international football match at Wembley. 88 minutes of the match have been played but not one man on either side has scored a goal.


A woman has 2 sons born within 5 minutes of each other. They appear to be identical but they are not twins.


A man has a fox, a hen and a bag of corn. He needs to take all 3 across the river. The boat will take him and one of them. He cannot leave the fox and the hen together or the hen and corn together. How does he get all 3 across uneaten?


A plane travelling from England to Germany crashes mid-way in France. Where would the survivors be buried?


Where is a day longer than a year?

Mr Smith and Mr Jones are next door neighbours. Mr Smith has a beautiful peacock. He told Mr Jones that if the peacock laid an egg in Mr Jones' garden, the egg would still belong to him. Mr Jones disagreed saying that if it laid an egg in his garden it would be his. Who is right?


What's white when it's dirty and black when it's clean?

Bert's father is Professor Maths. He has 4 children. 3 of them are called Add, Subtract and Divide. What is the fourth child called?


Rearrange the letters of NEW DOOR to make one word. You are not allowed to leave any letters out or put in any extra letters.


There was a boy who was 12 years old in 2002. In 2012 he was 2 years old. Explain.


Jessica was born on 20th December 2001. She says that this year her birthday will be in the summer. Explain.


You are at a junction. One road leads to the town you want to go to, the other leads to a marsh. There are no signs. However, there are two men: one who always tells the truth and the other who always lies. You are allowed to ask one of them one question to find the way to go. You do not know which man is which. What do you ask?


A family has 2 parents, 3 daughters and each daughter has 4 brothers. How many in the family?


What 7 letter word do most people pronounce wrongly.


5 men are going to church together. It starts raining. 4 of them get wet. The $5^{\text {th }}$ man, who does not have an umbrella, and was less than 1 m from the other 4 remained completely dry. Explain.


Rats can breed very quickly. Joe starts with 2 rats and finds that 6 months he ends up with 40 rats. How many rats would he end up with after 6 months if he started with 1 rat?


Joe has 4 white rabbits, 6 brown rabbits and 5 black rabbits. How many rabbits could say that they are the same colour as another of Joe's rabbits?


There were two mothers and two daughters in a train carriage. The train stopped and one of them got out. Two people remained. Explain.


2 men played chess for 9 hours. They played 5 games. Each man won the same number of games. No games were drawn or abandoned. Explain.


How can you take I away from 19 and get 20 ?


The Roman numeral for 9 is IX. Add one character to this to make it an even number.


New Year's Day is 7 days after Christmas Day. You would think that they would be on the same day of the week. However in 2009, Christmas Day was on Friday whereas New Year's Day was on Thursday. Explain.


## Read this out loud:

## YYURYYUBICURYY4ME



Read this out loud:

11 was a racehorse
12 was 12
111 a race
12112


Fred the postman has a round which takes him $13 / 4$ hours. On Friday he takes 105 minutes. Explain.


You have 9 red balls which appear to be identical. One ball is slightly lighter than the others. Using the scales below twice only, how could identify the lighter ball?


There is a room with 3 light bulbs in it. Each bulb is controlled by one switch. The switches are down a corridor away from the room. You are allowed to go to the switches ONE time and then to the room with the bulbs to work out which switch controls which bulb. You are on your own and have no mirrors!


What goes up but never goes down?


## What has 2 arms and 4 legs?



## What has 3 hands?



What is usually filled in the morning and emptied at night except at Christmas when it is filled at night and emptied in the morning?


What do you find in the middle of Derby that you don't find at all in Sheffield or Nottingham?


Alison works at the greengrocer's. When she was born, she weighed 3 kg and measured 30 cm . She is now 20 years old and is 150 cm tall. What does she weigh now?


In a drawer there are 5 pairs of pink socks and 4 pairs of blue socks. The socks are loose. What is the largest number of socks you need to take out of the drawer in order to be sure of getting a matching pair?


If you travel 6 miles south, followed by 4 miles north, what is the furthest distance you can be from your starting point?


In which sport do all the contestants except one on each team move backwards?


As I was going to St Ives, I met a man with 7 wives. Each wife had 7 sacks, each sack had 7 cats, each cat had 7 kittens. Kittens, cats, sacks and wives, how many were there going to St Ives?


Connor comes into school and tells his teacher that his mother is the same age as his granny and that they are both 50 years old today. How can this be?


## 4 points

My aunt's brother is not my uncle. Who is he?


You normally say, "I am, you are and he is." Is it ever correct to say, "I is"?


## When does April come before March?



Sam was in big trouble with his Dad. He was told to say something. If what he said was true, he would have no pocket money for a year. If he lied, he would be banned from TV for 2 months. What can he say to avoid any consequences?


Sam is in trouble at school. In front of the class, Sam's teacher Mrs Smegly tells him to pick one of two pieces of paper from a box. According to her, one piece has "lunchtime detentions for 2 months" while the other one has "another chance." However Sam knows that Mrs Smegly always writes the detention consequence on both pieces of paper. What can he do to escape detention?


## By moving one match stick only, can you turn

 this arrangement into a shop?

Answer on next slide.


A man is dozing during a church service. He is dreaming about the French revolution and the guillotine. His wife, seeing that he is nodding off taps him on the back of the neck. He has a heart attack and dies instantly. True or false? Give a reason.


The next 3 puzzles work only if read, not viewed

What game has 4 letters, starts with a tee and is played all over the world?

There are 20 fore heads in a boat 50 miles off land. The boat sinks and the lifeboat rescues 20 people. Nobody drowns and no other boat rescues anyone. Explain.


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4 points
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How many p's in a pod?


Some are a little quirky!
*Maths Puzzles

A new hotel has 100 rooms. The decorator needs to put numbers on all the doors. How many number 1 's does he need to buy?


A certain type of seaweed doubles in length every year. After 6 years it is 12 m long. How long would it have been after 5 years?


You have a 5 litre bottle and a 7 litre bottle. You have a tap and a sink. How can you measure 1 litre. You can pour from one bottle to another, refill and pour away as much as you need to. The bottles do not have a regular shape.


A man goes into $B \& Q$ to buy something for his house. He is told that 1 costs 80 p whereas 5 costs $£ 1.20$. His total bill is $£ 3.20$. What does he buy?


Stephanie runs a clothing shop. She sells shorts for $£ 36$, trousers for $£ 48$ and a hat for $£ 18$. What would she charge for boots?

£36

£18

£?

On average 25 acorns grow on a branch. Here is a chart showing how many branches trees have at different ages.

| Age | Branches |
| :--- | :--- |
| 10 | 5 |
| 20 | 10 |
| 30 | 15 |
| 40 |  |
| 50 | 25 |
| 60 | 30 |



How many acorns would you find on a 40 year old sycamore tree?

A snail is at the bottom of a 30 m well. Every day it crawls up 3 m before slipping back 2 m every night. How many days will it take it to escape from the well?


Mr Green is giving out sweets to the Stars of the Week in Blogly Primary School. He gives 5 sweets to infants and 6 sweets to juniors. Altogether he gives out 56 sweets to 10 children. How many infants and juniors make up the 10 ?


A 100 kg sack of potatoes is $99 \%$ water and $1 \%$ potato stuff. It is allowed to dry out until it is $98 \%$ water and $2 \%$ potato stuff. How heavy is the sack of potatoes now?


A ship is at anchor in a harbour. At low tide, the water is 2.6 m below the deck. Over the next 6 hours, the tide rises by 1.5 m . How far from the deck will the water be now?


A man has 10 sons. To the first son, he gives 10 oranges, the second son 20 , third son 30 etc. His $10^{\text {th }}$ son has 100 oranges. Each son goes out and sells the oranges to one customer. They use the same pricing policy and they each bring back the father $£ 2$. What was the pricing policy?


Add one character to make this equation correct.
$10 \quad 10 \quad 10=9.50$


Bert and Fred have the same amount of money. How much does Bert need to give Fred so that Fred has $£ 10$ more than Bert?


## 5 points

A bottle of perfume costs $£ 20$. The whisky is worth $£ 19$ more than the bottle. How much is the bottle worth?


The occupants of Bagley Close live in houses numbered 1-19. Each occupant has an 8 digit telephone number starting with 1 which is a multiple of their house number. What are the telephone numbers? Use a calculator.


Clue on the next slide. (Lose 3 points if you use it!)

You need to find the 8 digit number which starts with 1 and is divisible by numbers 1-19. By adding 1, 2, 3, 4 etc onto this number, you will get the phone numbers.

Think prime numbers.

If Fred gives one marble to Bert, they will have the same number. If Bert gives one marble to Fred, Bert will have half the amount of marbles Fred has. How many marbles do they each have?

5 points

A box of chocolates costs $£ 2$ plus half its price. How much does it cost?


Two friends are playing cards for 5 p a game. At the end Joe has won 3 games and Ben is 30 p up. How many games did they play altogether?


Bill and Bertha start a romantic meal by lighting 2 candles. They are both the same thickness but different lengths. One will burn for 7 hours and the other for 5 hours. At the end of the meal, they blow out the candles and find that one candle is twice the length of the other. How long was the meal?


A builder dug a hole 5 m long, 3 m wide and 2 m deep. Hoping to improve his daughter's Maths skills, he asked her, How many $\mathrm{m}^{3}$ of soil in the are the hole?


I have 9 sweets in a bag. I give 3 to Mark, 3 to Rebekah and 3 to India. At the end, there are still 3 sweets in the bag. Explain.


3 workers each get paid depending on how many hours they have worked. The plumber worked for 3 times a long as the painter and the painter worked 5 times as long as the electrician. The total wage bill was $£ 630$. How much was each man paid?


* These next few puzzles cannot usually be solved by a quick flash of inspiration. Children need to ask yes/no questions over a longer period of time to build up enough information to enable the Eureka moment!

*Longer Lateral
Thinking Pyzzes

3 pieces of coal are lying on the grass in a garden in early Spring. How did they get there?


A man walks into a pub and asks for a glass of water. The barman pulls a gun on him. They shake hands and the customer walks out satisfied.


A man walks into a bar and falls immediately falls down unconscious.


A man lives on the $16^{\text {th }}$ floor of a block of flats. Every day he takes the lift from down to the ground floor and then goes to work. On his way back from work, he takes the lift to the $5^{\text {th }}$ floor and then walks the rest of the way. If it is raining in the morning, on his return, he takes the lift to the $11^{\text {th }}$ floor before walking the rest of the way.


A father and his son are travelling in a car. The car crashes and the father is killed. The boy is taken to hospital and needs an operation. The surgeon comes into the operating theatre, looks at the boy and says, "I can't operate, he's my son."


Romeo and Juliet are lying side by side on the floor. Beside them is some water and broken glass. The window is open.


A man went into a field with a pack on his back and died.


A man is hanging 3 m from a beam in a barn. Underneath him is a pool of water. Outside is a tractor. He is dead.


While the soup simmered, Johnny missed his train.


A man who is broke, is parked outside a hotel.


A man is lying in a telephone box. He has injured his hands. The phone is off the hook. Outside is a fishing rod.


Two men are rescued from a desert island. In port one of them goes straight into a restaurant. He orders a bowl of Albatross
Soup. He takes one sip of the soup and then returns to the boat and shoots the other man rescued from the desert island.


