

STEMM Student Challenge

QUESTIONS



ROUND 1



Intermediate Section

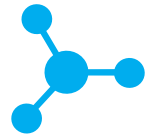


Years 7-8



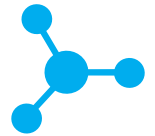
Q1

How many bones do sharks have in their bodies?



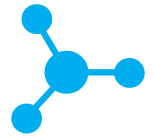
Q2

How many months have 31 days?



Q3

What is measured on a
chronometer?



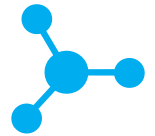
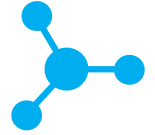
Q4

What 2 words were joined together to make the word smog?



Q5

Name the two tectonic plates that New Zealand lies across?



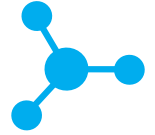
Q6

What is the human body's biggest organ?



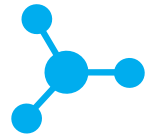
Q7

What is the area of an envelope if it is 10cm wide and 15cm long?



Q8

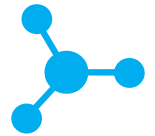
How many birth great-grandparents can a person have?



Q9

Which part of the rhubarb is poisonous?

- a) The stalk
- b) The roots
- c) The leaves



Q10

The molten rock that comes from a volcano after it has erupted is known as?



ANSWERS



ROUND 1



Intermediate Section

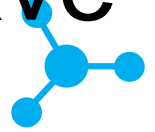


Years 7-8



Q1: How many bones do sharks have in their bodies?

Answer: 0



Q2: How many months have 31 days?



Answer: 7

January, March, May, July,
August, October, December



**Q3: What is measured on a
chronometer?**

Answer: Time



Q4: What 2 words were joined together to make the word smog?

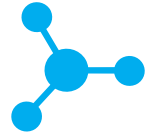
Answer: Smoke and Fog



Q5: Name the two tectonic plates that New Zealand lies across?



Answer: Australian Plate and Pacific Plate



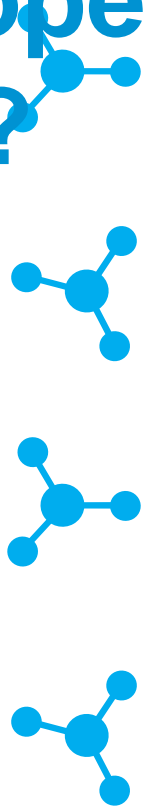
Q6: What is the human body's biggest organ?

Answer: The skin



Q7: What is the area of an envelope if it is 10cm wide and 15cm long?

Answer: 150 square centimetres



Q8: How many birth great-grandparents can a person have?

Answer: 8



Q9: Which part of the rhubarb is poisonous?



Answer: c) The leaves



Q10: The molten rock that comes from a volcano after it has erupted is known as what?

Answer: Lava (Magma)



QUESTIONS



ROUND 2



Intermediate Section



Years 7-8



Q1

Where is the sea of Tranquility?



Q2

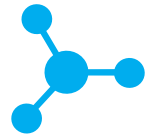
What does a car's radiator do?

- a) Warm the passengers
- b) Cool the water
- c) Filter the oil



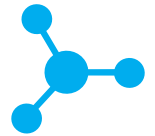
Q3

In computing what does the abbreviation www stand for?



Q4

What is the name of the largest ocean on earth?



Q5

What food makes up nearly all (around 99%) of a Giant Panda's diet?



Q6

What can something go faster than if it is truly supersonic?



Q7

What is the main gas found in the air we breathe?



Q8

What is the earth's primary source of energy?



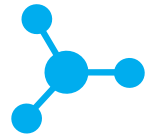
Q9

What are female elephant's called?



Q10

What is the name of NASA's most famous space telescope?



ANSWERS



ROUND 2



Intermediate Section



Years 7-8



Q1: Where is the Sea of Tranquility?

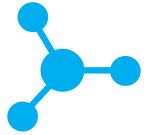


Answer: On the moon



Q2: What does a car's radiator do?

Answer: b) Cool the water



Q3: What does www stand for?

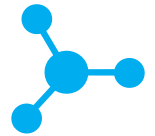


Answer: World Wide Web



Q4: What is the name of the largest ocean on earth?

Answer: The Pacific Ocean



Q5: What food makes up nearly all of a Giant Panda's diet?

Answer: Bamboo



Q6: What can something go faster than if it is truly supersonic?

Answer: Sound



Q7: What is the main gas found in the air we breathe?

Answer: Nitrogen



Q8: What is the earth's primary source of energy?



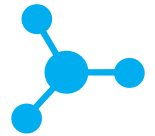
Answer: The sun

Q9: What are female elephants called?

Answer: Cows



Q10: What is the name of NASA's most famous space telescope?



Answer: Hubble Space Telescope

PRACTICAL TASK



ROUND 3



Intermediate Section

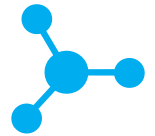


Years 7-8



ESTIMATION TASKS

1. Length: Cut a piece of crepe to a length of 100cm
2. Volume: Pour 100ml into the container
3. Mass: Place 100g of sugar into the container
4. Time: Time 1min on the stopwatch
5. Temperature: Estimate water temperature to 37 degrees Celsius and place in the cup



Estimation Scoring

1. Length: 95-105cm -2pts, 90-110cm -1pt
2. Volume: 95-105ml -2pts, 90-110ml -1pt
3. Mass: 95-105g -2pts, 90-110g -1pt
4. Time: 57-63sec -2pts, 54-66sec -1pt
5. Temperature: 32-42C -2pts, 29-45C -1pt



QUESTIONS



ROUND 4



Intermediate Section

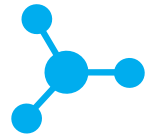


Years 7-8



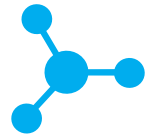
Q1

Who is New Zealand's most famous nuclear scientist who was born in Nelson in 1871?



Q2

What's 2 cubed divided by 2 squared?



Q3

Which bird can't fly but can swim faster than any other?



Q4

What device uses mirrors to help people see around corners?



Q5

What, in terms of time, do the letters GMT stand for?



Q6

Which is heavier – a cubic metre of ice or a cubic metre of water?



Q7

Bacterial infections in humans can be treated with what?



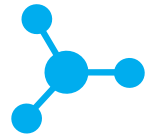
Q8

Which is the largest planet?



Q9

128 players enter a knockout tennis competition. How many matches must a player win to win the tournament?



Q10

What is H₂O more commonly known as?



ANSWERS



ROUND 4



Intermediate Section



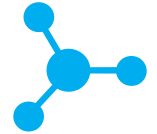
Years 7-8



Q1: Who is New Zealand's most famous nuclear scientist?



Answer: Ernest Rutherford

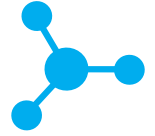


Q2:Whats 2 cubed divided by 2 squared?

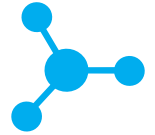


Answer: 2

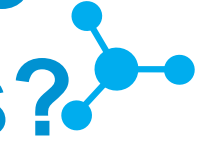
Q3: Which bird can't fly but can swim faster than any other?



Answer: The Penguin



Q4: What device uses mirrors to help people see around corners?



Answer: A Periscope



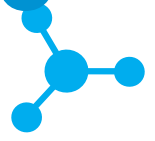
Q5: What, in terms of time, do the letters GMT stand for?



Answer: Greenwich Mean Time



Q6: What is heavier a cubic metre of ice or a cubic metre of water?

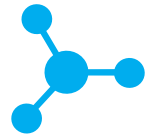


Answer: A cubic metre of water



Q7: Bacterial infections can be treated with what?

Answer: Antibiotics



Q8: Which is the largest planet?



Answer: Jupiter



Q9: 128 players - How many matches to win the tennis tournament?

Answer: 7



Q10: What is H₂O more commonly known as?



Answer: Water



QUESTIONS



ROUND 5



Intermediate Section



Years 7-8



Q1

How many lungs does the human body have?



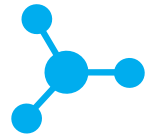
Q2

What is the mathematical term for an oblong?



Q3

True or False? Dimples on a golf ball help reduce drag and increase the distance the ball flies.



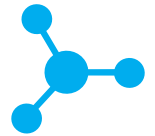
Q4

What's the hardest substance in the human body?



Q5

How many sides does a trapezium have?



Q6

What is the name of the process used by plants to convert sunlight into food?



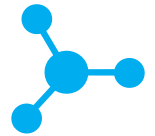
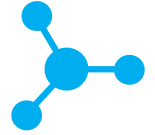
Q7

Earth is located in which galaxy?



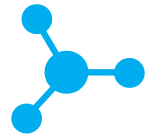
Q8

What is the average if I have 2,
Mary has 3 and Paul has 4?



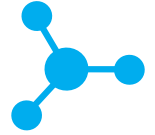
Q9

What ingredient of glass is found at the seaside?



Q10

What does an altimeter measure?



ANSWERS



ROUND 5



Intermediate Section



Years 7-8

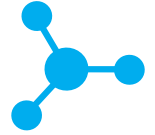


Q1: How many lungs does the human body have?

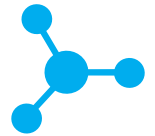
Answer: Two



Q2: What is the mathematical term for an oblong?

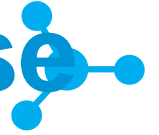


Answer: Rectangle



Q3: True or False? Dimples on a golf ball reduce drag and increase distance.

Answer: True



Q4: What's the hardest substance in the human body?

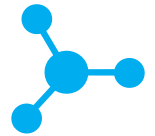


Answer: Tooth enamel



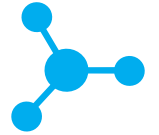
Q5: How many sides does a trapezium have?

Answer: Four



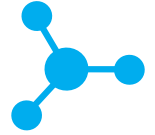
Q6: What is the name of the process used by plants to convert sunlight into food?

Answer: Photosynthesis



Q7: Earth is located in which galaxy?

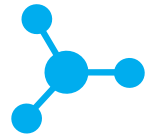
Answer: The Milky Way Galaxy



**Q8: What is the average if I have 2,
Mary has 3, and Paul has 4?**



Answer: 3



Q9: What ingredient of glass is found at the seaside?



Answer: Glass

Q10: What does an altimeter measure?

Answer: Height or altitude



Well done to all teams participating in STEMM Student Challenge 2015



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