



Biology

Name: _____

1. Which part of the eye refracts light?

A: Retina

B: Lens

C: Cornea

D: Pupil

2. What is the function of a cell's nucleus?

A: Create and fold proteins from amino acid

B: Synthesise lipids

C: Destroy cell waste and debris

D: Store genetic material and control cell activities

3. Bumblebees have coloured stripes which serve as a warning to predators. How many yellow stripes do they have?

A: 2

B: 3

C: 4

D: 5

4. What percentage of DNA is shared between dogs and humans?

A: 34%

B: 64%

C: 84%

D: 94%

5. Which of the following animals has 3 hearts?

A: Octopus

B: Lizard

C: Flamingo

D: Lamb

6. How tall is the tallest living tree?

A: 76m

B: 116m

C: 156m

D: 206m

7. Which bird has the largest wingspan?

A: Golden Eagle

B: Wandering Albatross

C: California Condor

D: Great White Pelican

8. Our blood has 4 main components: Plasma, red blood cells, white blood cells, and platelets. What percentage of the human blood is liquid, by volume?

A: 35%

B: 55%

C: 75%

D: 95%

9. What do worms use to breathe?

A: Skin

B: Tracheae

C: Gills

D: Lungs



Physics

Name: _____

1. Who discovered gravity?

- A: Albert Einstein B: Ernest Rutherford C: Robert Millikan D: Isaac Newton
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2. Which of the following metals is the best conductor of electricity?

- A: Copper B: Silver C: Gold D: Aluminium
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3. What type of energy is stored in a stretched string?

- A: Kinetic B: Elastic C: Chemical D: Gravitational Potential
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4. How long does it take for moonlight to reach the earth?

- A: 0.4 seconds B: 1.3 seconds C: 2.2 seconds D: 3.1 seconds
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5. Which of the following is a primary colour of light?

- A: Violet B: Yellow C: Green D: Orange
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6. When large stars in our galaxy die, their core collapses, resulting in a giant explosion. What is this called?

- A: Planetary Nebula B: Supernova C: Red Giant D: White Dwarf
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7. When cooled, most materials will contract. For which of the following materials is this not true?

- A: Graphite B: Water C: Diamond D: Gold
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8. Which of the following about x-ray scans is not true?

- A: Iodine can be injected into a blood vessel to highlight the kidneys and bladder
B: X-rays are a form of radiation like light or radio waves
C: Different parts of the body absorb x-rays in varying degrees
D: Some radiation remains in a patient's body after an x-ray examination
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9. What temperature is the coldest spot in the known universe in degrees celcius?

- A: -303.15 B: -270.15 C: -263.15 D: -240.15



Chemistry

Name: _____

1. What is the chemical name of the acid in vinegar?

- A: Ethanoic Acid B: Methanoic Acid C: Propanoic Acid D: Butanoic Acid

2. Proteins are macromolecules made from small subunits. What are these called?

- A: Glycerol B: Amino Acid C: Glucose D: Chitin

3. What gas causes the bubbles in fizzy drinks?

- A: Nitrogen B: Oxygen C: Hydrogen D: Carbon Dioxide

4. At approximately what temperature does glass melt at (in degrees Celsius)?

- A: 200 – 400 B: 500 – 700 C: 900 – 1100 D: 1400 – 1600

5. An alloy is a mixture of metals or a mixture of a metal and another element. What 2 metals is brass made from?

- A: Copper and Tin B: Copper and Zinc
C: Copper and Chromium D: Copper and Iron

6. Graphene is the strongest lightest material on Earth. What element is it made from?

- A: Sodium B: Titanium C: Carbon D: Silicon

7. What chemical compound is responsible for Mars' red colour?

- A: Copper Oxide B: Lead Oxide C: Iron Oxide D: Barium Sulphate

8. What is the chemical name for aspirin?

- A: Allyl Hexanoate B: Naphthalenemethanol
C: Benzyl Benzoate D: Acetylsalicylic Acid

9. Air can be compressed and cooled to produce liquid oxygen. What colour is this?

- A: Pale Blue B: Light Grey C: Dark Green D: Faint yellow

Biology

Which part of the eye refracts light?	Cornea
What is the function of a cell's nucleus?	Store genetic material and control cell activities
How many yellow stripes do bumblebees have?	2
What percentage of DNA is shared between dogs and humans?	84%
Which of the following animals has 3 hearts?	Octopus
How tall is the tallest living tree?	116m
Which bird has the largest wingspan?	Wandering Albatross
What percentage of the human blood is liquid, by volume?	55%
What do worms use to breathe?	Skin

Chemistry

What is the chemical name of the acid in vinegar?	Ethanoic acid
What are the subunits of proteins?	Amino acids
What gas causes the bubbles in fizzy drinks?	Carbon Dioxide
At approximately what temperature does glass melt (in degrees Celsius)?	1400-1600
What 2 metals is brass made from?	Copper and Zinc
What element is Graphene made from?	Carbon
What chemical compound is responsible for Mars' red colour?	Iron oxide
What is the chemical name for aspirin?	Acetylsalicylic acid
Air can be compressed and cooled to produce liquid oxygen. What colour is this?	Pale blue

Physics

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Which of the following metals is the best conductor of electricity?	Silver
What type of energy is stored in a stretched string?	Elastic
How long does it take for moonlight to reach the earth?	1.3 seconds
Which of the following is a primary colour of light?	Green
When large stars in our galaxy die, their core collapses, resulting in a giant explosion. What is this called?	Supernova
When cooled, most materials will contract. For which material is this not true?	Water
Which of the following about x-ray scans is not true?	Some radiation remains in a patient's body after an x-ray examination
What temperature is the coldest spot in the known universe in degrees celcius?	-270.15 °C