

80 Trivia Questions for 6th Graders

Trivia for ages 11-12 across chemistry, ancient history and critical thinking.

Name: _____ Date: _____

Pre-Algebra & Math Logic

1. If $x + 7 = 15$, what is x ?

2. What is the ratio of 6 to 18, simplified?

3. What is 15% of 80?

4. What is the greatest common factor of 24 and 36?

5. What is $(-5) + 12$?

6. What do you call the distance around a circle?

7. What is 2 to the power of 6?

8. The angles of any triangle always add up to how many degrees?

9. What is the least common multiple of 4 and 6?

10. A shirt costs \$20 and is 25% off. What's the sale price?

Earth & Space Science

11. What are the giant moving slabs of Earth's crust called?

12. What is the most abundant gas in Earth's atmosphere?

13. What scale measures earthquake magnitude?

14. Which layer of Earth is liquid metal?

15. What is the name for a rock from space that lands on Earth?

16. What type of rock forms from cooled lava or magma?

17. What causes ocean tides?

18. What is the hottest planet in our solar system (hint: not the closest to the Sun)?

19. What do we call the boundary where two air masses meet, often causing storms?

20. Roughly how old is the Earth?

Ancient Civilizations

21. Which ancient civilization built the Colosseum?

22. Democracy was born in which ancient Greek city-state?

23. What writing system did ancient Egyptians use?

24. Which ancient wonder of the world still stands today?

25. Who was the boy king of Egypt whose tomb was found nearly untouched in 1922?

26. The Silk Road connected China with which continent's markets?

27. Which empire was ruled by Julius Caesar's successors?

28. What civilization built Machu Picchu high in the Andes?

29. Which ancient Greek wrote the epic poems the Iliad and the Odyssey?

30. Cuneiform, one of the world's first writing systems, came from which region?

World Geography & Cultures

31. What is the capital of Egypt?

32. Which country has the largest population in the world?

33. What is the longest mountain range in the world (above sea level)?

34. Which strait separates Europe from Africa at their closest point?

35. What currency is used by most countries in the European Union?

36. Which country is home to the Taj Mahal?

37. What is the only continent crossed by every line of longitude?

38. Which desert is the largest hot desert in the world?

39. What language is spoken in Brazil?

40. Which two countries share the longest international border?

Challenge Round

41. What is the powerhouse of the cell?

42. Which element has the atomic number 1?

43. Who painted the ceiling of the Sistine Chapel?

44. What is the longest bone in the human body?

45. Which planet has the most moons confirmed so far?

46. What is the term for animals active at dawn and dusk?

47. In computing, what does 'CPU' stand for?

48. What is the world's most spoken language by total speakers (native + learned)?

49. Which famous ship's wreck was found in 1985, 73 years after it sank?

50. What is the square root of 169?

Chemistry Basics

51. What is the periodic table?

52. What is the chemical symbol for gold?

53. What is the atomic number of carbon?

54. What are the three particles that make up an atom?

55. What is an element?

56. What do we call a substance formed when two or more elements chemically combine?

57. What happens during a chemical reaction?

58. What is the pH scale used for?

59. What metal is liquid at room temperature?

60. What is the chemical symbol for iron?

Ancient Civilisations

61. What empire was ruled by Julius Caesar?

62. What ancient river civilisation built the Hanging Gardens?

63. Who was Alexander the Great?

64. What is the name of the ancient trade route that connected China to Europe?

65. What civilisation invented the concept of zero independently?

66. What ancient city-state is known as the birthplace of democracy?

67. Who was the first Roman Emperor?

68. What is the name of the ancient Japanese warriors who lived by a strict code of honour?

69. In ancient Egypt, who was the ruler called?

70. What caused the fall of the Western Roman Empire in 476 AD?

Critical Thinking & Logic

71. If all cats are mammals and Felix is a cat, what can you conclude?

72. What is the difference between correlation and causation?

73. A car travels 120 km in 1.5 hours. What is its average speed?

74. What logical fallacy occurs when you attack a person rather than their argument?

75. If you flip a fair coin 3 times and get heads each time, what is the probability of heads on the 4th flip?

76. What is a hypothesis?

77. In a Venn diagram, what does the overlapping section represent?

78. What is the difference between a primary source and a secondary source?

79. If a store has 40% off and a jacket originally costs \$80, what is the sale price?

80. What do we call an argument where the conclusion follows logically from the premises?

Answer Key

Pre-Algebra & Math Logic

1. If $x + 7 = 15$, what is x ? - 8.
2. What is the ratio of 6 to 18, simplified? - 1:3.
3. What is 15% of 80? - 12.
4. What is the greatest common factor of 24 and 36? - 12.
5. What is $(-5) + 12$? - 7.
6. What do you call the distance around a circle? - The circumference.
7. What is 2 to the power of 6? - 64.
8. The angles of any triangle always add up to how many degrees? - 180.
9. What is the least common multiple of 4 and 6? - 12.
10. A shirt costs \$20 and is 25% off. What's the sale price? - \$15.

Earth & Space Science

11. What are the giant moving slabs of Earth's crust called? - Tectonic plates.
12. What is the most abundant gas in Earth's atmosphere? - Nitrogen — about 78%.
13. What scale measures earthquake magnitude? - The Richter scale (scientists now also use the moment magnitude scale).
14. Which layer of Earth is liquid metal? - The outer core.
15. What is the name for a rock from space that lands on Earth? - A meteorite.
16. What type of rock forms from cooled lava or magma? - Igneous rock.
17. What causes ocean tides? - Mainly the Moon's gravity pulling on Earth's water.
18. What is the hottest planet in our solar system (hint: not the closest to the Sun)? - Venus — its thick atmosphere traps heat.
19. What do we call the boundary where two air masses meet, often causing storms? - A front.
20. Roughly how old is the Earth? - About 4.5 billion years.

Ancient Civilizations

21. Which ancient civilization built the Colosseum? - Ancient Rome.
22. Democracy was born in which ancient Greek city-state? - Athens.
23. What writing system did ancient Egyptians use? - Hieroglyphics.
24. Which ancient wonder of the world still stands today? - The Great Pyramid of Giza.
25. Who was the boy king of Egypt whose tomb was found nearly untouched in 1922? - Tutankhamun (King Tut).
26. The Silk Road connected China with which continent's markets? - Europe (passing through Asia and the Middle East).

27. Which empire was ruled by Julius Caesar's successors? - The Roman Empire.
28. What civilization built Machu Picchu high in the Andes? - The Inca.
29. Which ancient Greek wrote the epic poems the Iliad and the Odyssey? - Homer.
30. Cuneiform, one of the world's first writing systems, came from which region? - Mesopotamia (modern-day Iraq) — invented by the Sumerians.

World Geography & Cultures

31. What is the capital of Egypt? - Cairo.
32. Which country has the largest population in the world? - India. It passed China in 2023.
33. What is the longest mountain range in the world (above sea level)? - The Andes in South America.
34. Which strait separates Europe from Africa at their closest point? - The Strait of Gibraltar.
35. What currency is used by most countries in the European Union? - The euro.
36. Which country is home to the Taj Mahal? - India.
37. What is the only continent crossed by every line of longitude? - Antarctica.
38. Which desert is the largest hot desert in the world? - The Sahara.
39. What language is spoken in Brazil? - Portuguese.
40. Which two countries share the longest international border? - The United States and Canada.

Challenge Round

41. What is the powerhouse of the cell? - The mitochondria.
42. Which element has the atomic number 1? - Hydrogen.
43. Who painted the ceiling of the Sistine Chapel? - Michelangelo.
44. What is the longest bone in the human body? - The femur (thigh bone).
45. Which planet has the most moons confirmed so far? - Saturn — it overtook Jupiter with over 140 confirmed moons. New moons keep being discovered, so this race isn't over.
46. What is the term for animals active at dawn and dusk? - Crepuscular.
47. In computing, what does 'CPU' stand for? - Central Processing Unit.
48. What is the world's most spoken language by total speakers (native + learned)? - English.
49. Which famous ship's wreck was found in 1985, 73 years after it sank? - The Titanic.
50. What is the square root of 169? - 13.

Chemistry Basics

51. What is the periodic table? - A chart that organises all known chemical elements by their atomic number and properties.

52. What is the chemical symbol for gold? - Au (from the Latin "aurum").
53. What is the atomic number of carbon? - 6 — carbon has 6 protons in its nucleus.
54. What are the three particles that make up an atom? - Protons (positive), neutrons (neutral), and electrons (negative).
55. What is an element? - A pure substance made of only one type of atom that cannot be broken down chemically.
56. What do we call a substance formed when two or more elements chemically combine? - A compound (e.g. H_2O is a compound of hydrogen and oxygen).
57. What happens during a chemical reaction? - Atoms rearrange to form new substances with different properties.
58. What is the pH scale used for? - Measuring how acidic or basic (alkaline) a substance is — 0 is most acidic, 14 is most basic, 7 is neutral.
59. What metal is liquid at room temperature? - Mercury.
60. What is the chemical symbol for iron? - Fe, from the Latin ferrum.

Ancient Civilisations

61. What empire was ruled by Julius Caesar? - The Roman Empire.
62. What ancient river civilisation built the Hanging Gardens? - Ancient Mesopotamia (Babylon, in modern Iraq).
63. Who was Alexander the Great? - A Macedonian king who conquered one of the largest empires in ancient history, stretching from Greece to India.
64. What is the name of the ancient trade route that connected China to Europe? - The Silk Road.
65. What civilisation invented the concept of zero independently? - The Mayans (and separately the Indian mathematician Brahmagupta).
66. What ancient city-state is known as the birthplace of democracy? - Athens, Greece.
67. Who was the first Roman Emperor? - Augustus Caesar (Octavian), in 27 BC.
68. What is the name of the ancient Japanese warriors who lived by a strict code of honour? - Samurai — their code was called Bushido.
69. In ancient Egypt, who was the ruler called? - Pharaoh.
70. What caused the fall of the Western Roman Empire in 476 AD? - A combination of internal instability, economic troubles, and invasions by Germanic tribes (the Visigoths and Vandals among others).

Critical Thinking & Logic

71. If all cats are mammals and Felix is a cat, what can you conclude? - Felix is a mammal. (This is called deductive reasoning.)
72. What is the difference between correlation and causation? - Correlation means two things happen together; causation means one thing directly causes the other. Correlation does not always mean causation.

73. A car travels 120 km in 1.5 hours. What is its average speed? - 80 km/h ($120 \div 1.5 = 80$).
74. What logical fallacy occurs when you attack a person rather than their argument? - Ad hominem.
75. If you flip a fair coin 3 times and get heads each time, what is the probability of heads on the 4th flip? - Still 50% ($\frac{1}{2}$) — each flip is independent.
76. What is a hypothesis? - A testable prediction or proposed explanation for an observation, used in scientific experiments.
77. In a Venn diagram, what does the overlapping section represent? - Things that belong to both groups (shared characteristics).
78. What is the difference between a primary source and a secondary source? - A primary source is an original document or eyewitness account; a secondary source is an interpretation or summary written later.
79. If a store has 40% off and a jacket originally costs \$80, what is the sale price? - \$48 (40% of \$80 = \$32; $\$80 - \$32 = \$48$).
80. What do we call an argument where the conclusion follows logically from the premises? - A valid argument (in formal logic).