Grade 8 general knowledge

Answer guide: every question this quiz can draw, with its correct answers, by section. Made 2026-11-01. Confidential: contains the answers.

About this quiz

Sections	4	Attempts	3, best attempt counts
Questions per attempt	17	New questions on retake	Yes
Different questions	28	Tries per question	2
Pass mark	70%	Feedback	only at the end, answers shown only in the review
Partial credit	Partial credit (per option)	Time limit	20 min

Banks: Mathematics (11 questions, revision 2); Science (10 questions, revision 1); English (10 questions, revision 1)

Sections

1. Warm-up: 3 questions per attempt, from 9 possible questions
2. Mathematics: 4 questions per attempt, from 6 possible questions
3. Science: 4 questions per attempt, from 10 possible questions
4. English: 6 questions per attempt, from 6 possible questions

Warm-up

3 questions per attempt. Questions appear in draw order, choices are shuffled, 3 questions per page.

One question from each subject, all on one page. You get two tries at each.

Draw 1: 1 at random from 4 eligible questions in Mathematics tagged number

1.1 Single choice · Bank: Mathematics · Id: `m_percent` · Tags: number
1 point · All or nothing · 2 tries

What is $\frac{3}{4}$ written as a percentage?

CORRECT ANSWER

A 34%

✓ B **75%** CORRECT

C 0.75%

D 43%

FEEDBACK

When right	Right. 3 divided by 4 is 0.75, and 0.75 is 75 hundredths.
When wrong	Divide 3 by 4, then multiply by 100.

1.2 Range slider · Bank: Mathematics · Id: `m_sqrt` · Tags: number
1 point · Sliding credit within the tolerance · 2 tries

Estimate $\sqrt{50}$ to one decimal place.

CORRECT VALUE

7 to 7.1

- Slider from 0 to 10 in steps of 0.1
- Tolerance: 0.5 either side, with sliding part marks

FEEDBACK

When right	Good estimate. 7 squared is 49, so the square root of 50 is just over 7 (about 7.07).
When partly right	Close. 7 squared is 49, so the answer is just over 7.
When wrong	Think about which whole numbers squared are close to 50.

1.3 Sort the list · Bank: Mathematics · Id: `m_order` · Tags: number
1 point · Per item in the right place · 2 tries

Put these numbers in order, smallest first.

CORRECT ORDER

1. -3
2. 0.25
3. $\frac{1}{2}$
4. 0.6
5. $\frac{2}{3}$

Learners see the items shuffled.

FEEDBACK

When right	Correct. As decimals: -3, 0.25, 0.5, 0.6, 0.667.
When wrong	Try writing each one as a decimal first.

1.4 Drag to categorise · Bank: Mathematics · Id: `m_primes` · Tags: number
2 points · Per card in the right place · 2 tries

Sort the numbers into prime and composite. One number is neither, so leave it out.

CORRECT GROUPS

Prime

- 2
- 11
- 17

Composite

- 9
- 15
- 21

In no group (should be left out): ~~1~~

FEEDBACK

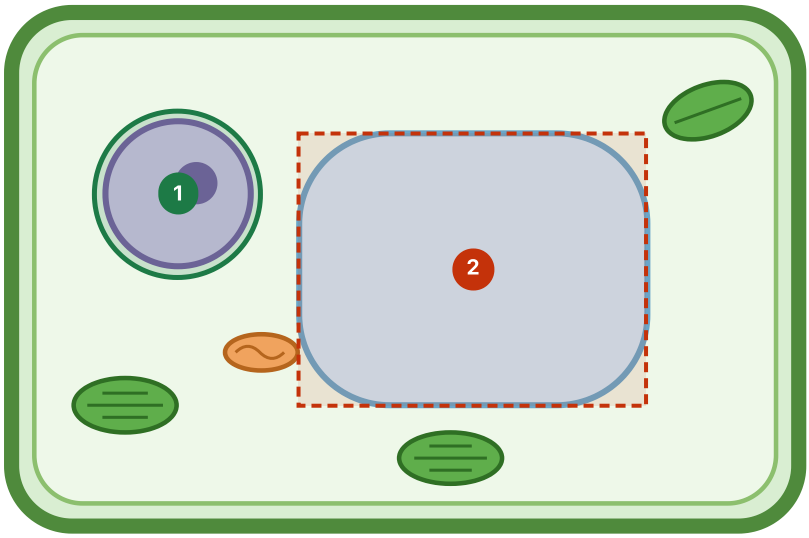
When right	Correct. 1 is neither prime nor composite.
When partly right	Nearly. Remember that 1 is neither prime nor composite.

Draw 2: 1 at random from 3 eligible questions in Science tagged biology

1.5 Image hotspot · Bank: Science · Id: `s_nucleus` · Tags: biology
1 point · Per correct area found · 2 tries

This is a plant cell. Place a pin on the **nucleus**.

CORRECT AREAS (1)



✓ Area 1: Nucleus (correct)
✗ Area 2: Vacuole (named wrong area)

Learners place up to 1 pin. Image description: Diagram of a plant cell with a cell wall, a large vacuole, a nucleus, chloroplasts and a mitochondrion

FEEDBACK

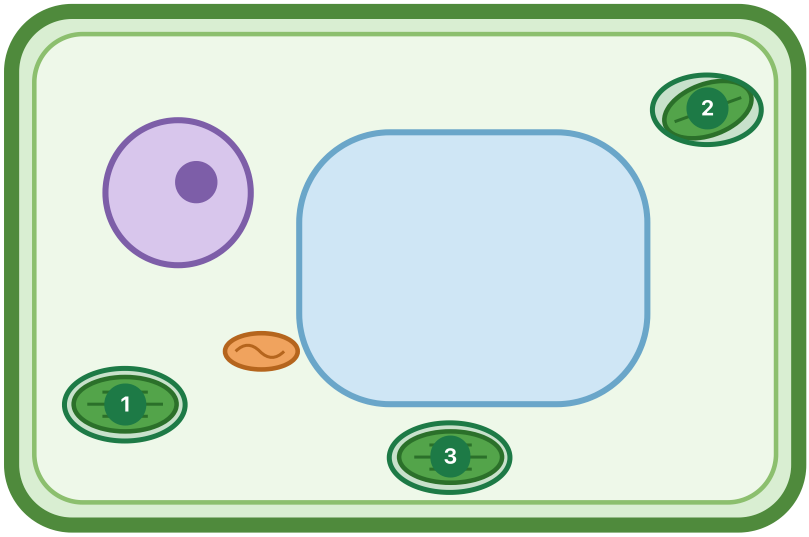
When right	Yes. The nucleus controls the cell and holds its genetic material.
When wrong	The nucleus is the round structure with a dark spot (the nucleolus) inside it.

Also eligible in Science. It is drawn at most once per attempt.

1.6 Image hotspot · Bank: Science · Id: `s_chloroplasts` · Tags: biology
2 points · Per correct area found · 2 tries

Place a pin on each **chloroplast** in the plant cell.

CORRECT AREAS (3)



- ✓ Area 1: Chloroplast, lower left (correct)
- ✓ Area 2: Chloroplast, upper right (correct)
- ✓ Area 3: Chloroplast, bottom middle (correct)

Learners place up to 3 pins. Image description: Diagram of a plant cell with a cell wall, a large vacuole, a nucleus, chloroplasts and a mitochondrion

FEEDBACK

When right	All three found. Chloroplasts are where photosynthesis happens.
When partly right	Some found. There are three chloroplasts.
When wrong	Chloroplasts are the small green oval shapes.

Also eligible in Science. It is drawn at most once per attempt.

1.7 Single choice · Bank: Science · Id: `s_photo` · Tags: biology
1 point · All or nothing · 2 tries

Which process do plants use to make their own food using light energy?

CORRECT ANSWER

- ✓ A **Photosynthesis** CORRECT
- B Respiration
  If chosen: Respiration releases energy from food. It does not make food.
- C Digestion
- D Evaporation

Also eligible in Science. It is drawn at most once per attempt.

Draw 3: 1 at random from 2 eligible questions in English tagged vocabulary

1.8 Single choice · Bank: English · Id: `e_synonym` · Tags: vocabulary
1 point · All or nothing · 2 tries

Which word means the same as *enormous*?

CORRECT ANSWER

✓ A **Huge** CORRECT

B Tiny
If chosen: Tiny is the opposite: an antonym.

C Quick

D Quiet

1.9 Drag to match · Bank: English · Id: `e_prefix` · Tags: vocabulary
1 point · Per correct pair · 2 tries

Match each prefix to its meaning.

CORRECT PAIRS

Prompt		Answer
un-	→	not
re-	→	again
pre-	→	before
sub-	→	under

Extra wrong answers: ~~after~~

Mathematics

4 questions per attempt. Questions are shuffled, choices are shuffled, 1 question per page.

Four questions picked at random from the algebra, geometry and data questions.

---

4 at random from 6 eligible questions in Mathematics tagged algebra, geometry, data

2.1 Single choice · Bank: Mathematics · Id: `m_solve` · Tags: algebra
1 point · All or nothing · 2 tries

Solve $3x + 5 = 20$.

CORRECT ANSWER

✓ A $x = 5$ CORRECT

B $x = 15$
If chosen: That is 3x, not x. Divide by 3 as well.

C $x = \frac{25}{3}$
If chosen: It looks like 5 was added to 20. Subtract it instead.

D $x = 3$

FEEDBACK

When right	Yes. Subtract 5 from both sides to get 3x = 15, then divide by 3.
When wrong	Undo the + 5 first, then undo the multiply by 3.

2.2 Fill in the blanks · Bank: Mathematics · Id: `m_simplify` · Tags: algebra
1 point · Per correct blank · 2 tries

Simplify each expression.

COMPLETED TEXT

2x + 3x = [1] 5 x

4(y + 2) = 4y + [2] 8

Blank	Kind	Accepted answers
1	Typed	5
2	Typed	8

Typed answers ignore extra spaces.

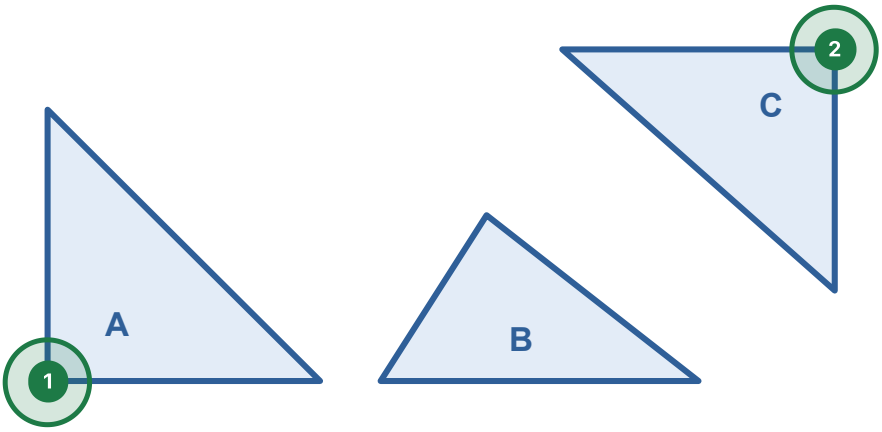
FEEDBACK

When right	Correct. Like terms add, and the 4 multiplies both terms in the brackets.
When wrong	Collect like terms, and multiply everything inside the brackets by 4.

2.3 Image hotspot · Bank: Mathematics · Id: `m_right_angles` · Tags: geometry
2 points · Areas found minus wrong pins · 2 tries

Place a pin on each **right angle** in the diagram.

CORRECT AREAS (2)



- ✓ Area 1: Bottom left corner of triangle A (correct)
- ✓ Area 2: Top right corner of triangle C (correct)

Learners place up to 2 pins. Image description: Three triangles labelled A, B and C

FEEDBACK

When right	Yes. Triangles A and C each have one right angle. Triangle B has none.
When partly right	Part way there. Two of the triangles have a right angle.
When wrong	Look for corners that form a perfect L shape.

2.4 Single choice · Bank: Mathematics · Id: `m_triangle` · Tags: geometry
1 point · All or nothing · 2 tries

The three angles inside any triangle add up to how many degrees?

CORRECT ANSWER

- A 90
- ✓ B **180** CORRECT
- C 270
- D 360
  If chosen: 360 degrees is the total for a quadrilateral.

FEEDBACK

When right	Correct.
When wrong	The answer is 180 degrees.

2.5 Drag to match · Bank: Mathematics · Id: `m_sides` · Tags: geometry
1 point · Per correct pair · 2 tries

Match each shape to its number of sides.

CORRECT PAIRS

Prompt		Answer
Triangle	→	3
Pentagon	→	5
Hexagon	→	6
Octagon	→	8

Extra wrong answers: ~~4~~, ~~7~~

2.6 Multiple choice · Bank: Mathematics · Id: `m_stats` · Tags: data
1 point · Partial credit (per option) · 2 tries

For the data 2, 4, 4, 5, 10, which statements are true? Select all that apply.

CORRECT ANSWERS (3 OF 5)

- ✓ A **The mean is 5** CORRECT
- ✓ B **The median is 4** CORRECT
- C The mode is 5
  If chosen: The mode is the most common value.
- ✓ D **The range is 8** CORRECT
- E The range is 10
  If chosen: The range is the largest value minus the smallest.

FEEDBACK

When right	All correct.
When partly right	Some of those are right. Check each measure again.
When wrong	Work out each measure in turn: mean, median, mode and range.

Science

4 questions per attempt. Questions are shuffled, choices are shuffled, 1 question per page.

This section has its own settings: answers shown when the learner asks (no points).

Four questions from any area of science. Stuck? Use **Show answer**, but that question will not score.

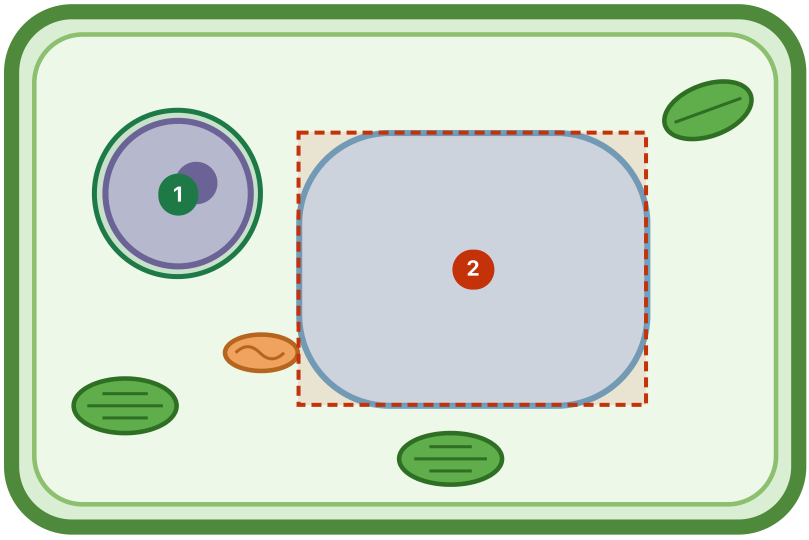
---

4 at random from 10 eligible questions in Science

3.1 Image hotspot · Bank: Science · Id: `s_nucleus` · Tags: biology
1 point · Per correct area found · 2 tries

This is a plant cell. Place a pin on the **nucleus**.

CORRECT AREAS (1)



✓ Area 1: Nucleus (correct)
✗ Area 2: Vacuole (named wrong area)

Learners place up to 1 pin. Image description: Diagram of a plant cell with a cell wall, a large vacuole, a nucleus, chloroplasts and a mitochondrion

FEEDBACK

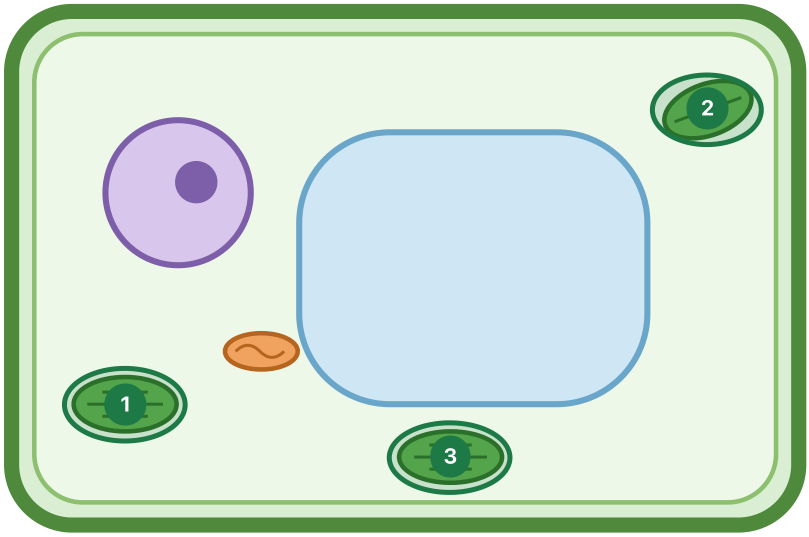
When right	Yes. The nucleus controls the cell and holds its genetic material.
When wrong	The nucleus is the round structure with a dark spot (the nucleolus) inside it.

Also eligible in Warm-up (draw 2). It is drawn at most once per attempt.

3.2 Image hotspot · Bank: Science · Id: `s_chloroplasts` · Tags: biology
2 points · Per correct area found · 2 tries

Place a pin on each **chloroplast** in the plant cell.

CORRECT AREAS (3)



- ✓ Area 1: Chloroplast, lower left (correct)
- ✓ Area 2: Chloroplast, upper right (correct)
- ✓ Area 3: Chloroplast, bottom middle (correct)

Learners place up to 3 pins. Image description: Diagram of a plant cell with a cell wall, a large vacuole, a nucleus, chloroplasts and a mitochondrion

FEEDBACK

When right	All three found. Chloroplasts are where photosynthesis happens.
When partly right	Some found. There are three chloroplasts.
When wrong	Chloroplasts are the small green oval shapes.

Also eligible in Warm-up (draw 2). It is drawn at most once per attempt.

3.3 Single choice · Bank: Science · Id: `s_photo` · Tags: biology
1 point · All or nothing · 2 tries

Which process do plants use to make their own food using light energy?

CORRECT ANSWER

- ✓ A **Photosynthesis** CORRECT
- B Respiration
  If chosen: Respiration releases energy from food. It does not make food.
- C Digestion
- D Evaporation

Also eligible in Warm-up (draw 2). It is drawn at most once per attempt.

3.4 Multiple choice · Bank: Science · Id: `s_changes` · Tags: chemistry
1 point · Partial credit (per option) · 2 tries

Which of these are **chemical** changes? Select all that apply.

CORRECT ANSWERS (3 OF 5)

- ✓ A **Burning wood** CORRECT
- ✓ B **Iron rusting** CORRECT
- C Ice melting
  If chosen: Melting is a physical change: the water is still water.
- ✓ D **Baking a cake** CORRECT
- E Sugar dissolving in water

FEEDBACK

When right	Correct. Each of those makes a new substance.
When partly right	Partly right. Ask whether a new substance is made.
When wrong	A chemical change makes a new substance.

3.5 Sort the list · Bank: Science · Id: `s_planets` · Tags: earth
1 point · Per item in the right place · 2 tries

Order these planets from closest to the Sun to furthest away.

CORRECT ORDER

1. Mercury
2. Venus
3. Earth
4. Mars
5. Jupiter

Learners see the items shuffled.

3.6 Drag to categorise · Bank: Science · Id: `s_states` · Tags: chemistry
1 point · Per card in the right place · 2 tries

At room temperature, is each substance a solid, a liquid or a gas?

CORRECT GROUPS

Solid
- Iron
- Salt

Liquid
- Water
- Mercury

Gas
- Oxygen
- Carbon dioxide

3.7 Range slider · Bank: Science · Id: `s_boil` · Tags: physics
1 point · Sliding credit within the tolerance · 2 tries

At sea level, at what temperature does pure water boil?

CORRECT VALUE

100 °C

- Slider from 0 to 200 °C in steps of 1
- Tolerance: 10 °C either side, with sliding part marks
- End labels: Freezing cold / Very hot

FEEDBACK

When right	Correct, 100 degrees Celsius.
When partly right	Close. The answer is 100 degrees Celsius.
When wrong	Pure water boils at 100 degrees Celsius at sea level.

3.8 Drag to match · Bank: Science · Id: `s_units` · Tags: physics
1 point · Per correct pair · 2 tries

Match each quantity to its unit.

CORRECT PAIRS

Prompt		Answer
Force	→	newton
Energy	→	joule
Power	→	watt
Electric current	→	ampere

Extra wrong answers: ~~kilogram~~

3.9 Fill in the blanks · Bank: Science · Id: `s_water` · Tags: chemistry
1 point · Per correct blank · 2 tries

Complete the sentences.

COMPLETED TEXT

A water molecule is made of hydrogen and [1] **oxygen** . Its chemical formula is [2] **H2O** .

Blank	Kind	Accepted answers
1	Drop-down	✓ **oxygen**, ~~nitrogen~~, ~~carbon~~
2	Typed	H2O

Typed answers ignore extra spaces.

FEEDBACK

When right	Correct. Two hydrogen atoms and one oxygen atom.
When wrong	Water is two hydrogen atoms joined to one oxygen atom.

3.10 Single choice · Bank: Science · Id: `s_falling` · Tags: physics
1 point · All or nothing · 2 tries

A ball is dropped from a height. Ignoring air resistance, what happens to its speed as it falls?

CORRECT ANSWER

- ✓ A **It increases** CORRECT
- B It stays the same
- C It decreases

FEEDBACK

When right	Yes. Gravity keeps accelerating the ball downwards.
When wrong	Gravity pulls the ball the whole way down, so it keeps speeding up.

English

6 questions per attempt. Questions are shuffled, choices are shuffled, 2 questions per page.

This section has its own settings: 1 try, feedback only at the end.

Every grammar and punctuation question, two per page. One try each, and you will see how you did at the end.

All 6 questions from English tagged grammar, punctuation

4.1 Fill in the blanks · Bank: English · Id: `e_agree` · Tags: grammar
1 point · Per correct blank · 1 try

Choose the correct verb.

COMPLETED TEXT

Neither of the students [1] **has** finished the project yet.

Blank	Kind	Accepted answers
1	Drop-down	✓ **has**, ~~have~~

Typed answers ignore extra spaces.

FEEDBACK

When right	Correct. Neither is singular, so it takes has.
When wrong	Neither means not one, so the verb is singular: has.

4.2 Fill in the blanks · Bank: English · Id: `e_homophones` · Tags: grammar
1 point · Per correct blank · 1 try

Choose the right word for each gap.

COMPLETED TEXT

[1] **They're** going to bring [2] **their** books over [3] **there** .

Blank	Kind	Accepted answers
1	Drop-down	✓ **They're**, ~~Their~~, ~~There~~
2	Drop-down	~~they're~~, ✓ **their**, ~~there~~
3	Drop-down	~~they're~~, ~~their~~, ✓ **there**

Typed answers ignore extra spaces.

FEEDBACK

When right	Correct. They're = they are, their = belonging to them, there = a place.
When wrong	They're means they are. Their shows belonging. There is a place.

4.3 Multiple choice · Bank: English · Id: `e_nouns` · Tags: grammar
1 point · Partial credit (per option) · 1 try

Select all the **nouns**.

CORRECT ANSWERS (3 OF 6)

- ✓ A **happiness** CORRECT
- B quickly
- ✓ C **mountain** CORRECT
- D jump
- ✓ E **teacher** CORRECT
- F blue

FEEDBACK

When right	Correct. Nouns name people, places, things and ideas.
When partly right	Some right. Happiness is a noun too: it names an idea.
When wrong	Nouns name people, places, things and ideas.

4.4 Drag to categorise · Bank: English · Id: `e_parts` · Tags: grammar
1 point · Per card in the right place · 1 try

Sort the words by part of speech.

CORRECT GROUPS

Noun	Verb	Adjective
• river	• swim	• bright
• idea	• whisper	• gentle

4.5 Single choice · Bank: English · Id: `e_apostrophe` · Tags: punctuation
1 point · All or nothing · 1 try

Which sentence uses apostrophes correctly?

CORRECT ANSWER

- ✓ A **The dog wagged its tail.** CORRECT
- B The dog wagged it's tail.
  If chosen: It's means it is.
- C The dogs' wagged their tail's.
- D Its' a sunny day.

FEEDBACK

When right	Correct. Its (no apostrophe) shows belonging.
When wrong	Its shows belonging; it's means it is.

4.6 Fill in the blanks · Bank: English · Id: `e_plural` · Tags: grammar
1 point · Per correct blank · 1 try

Type the plural of each word.

COMPLETED TEXT

One child, two [1] **children** .

One mouse, two [2] **mice** .

Blank	Kind	Accepted answers
1	Typed	children
2	Typed	mice

Typed answers ignore extra spaces.

FEEDBACK

When right	Correct. Both are irregular plurals.
When wrong	These are irregular plurals: children and mice.

End of the answer guide for Grade 8 general knowledge. Quiz id `quiz_squizzy_sample`.