

ANSWERS FOR NEGATIVES AND ROMAN NUMERALS

1. 9, -6

2. -24, -13, 0, 21, 35

3. 1.1, -0.5

4. 24

5. $x=125$ $y=-75$

6. J, G, A, E, H

7. MCMM

8. -100, 150

9. -60, -140

10. 709

11. 50

12. -75, -200

13. 115

14. 2006

15. 92, 73, 37, 12, -2, -12

16. -5

17. Parent Check

18. LIV, LXVI

19. 76, 93

20. -10, 45

21. -35, -80

22. a) (4, -4) (3, -5) (5, -3) b) (-4, -2) (-5, -1)

23. 4, 9, 14

24. (-1, 1) (-0.5, 1.5)

25. -12, 2

26. MMDX, 1743

27. $A = -7$ 13

28. 67

29. $A = -80$ $B = 60$

30. Positive or Negative-

If you multiply a positive number by a positive number you will get a positive answer- $5 \times 2 = 10$

If you multiply a positive number by a negative number you get a negative answer- $5 \times -2 = -10$

Mental Arithmetic 1

1. $\frac{7}{11}$

2. $\frac{10}{20}$ or $\frac{1}{2}$

3. $\frac{12}{15}$ or $\frac{4}{5}$

4. $1 \frac{3}{7}$

5. $1 \frac{2}{8}$ or $1 \frac{1}{4}$

6. $1 \frac{6}{12}$ or $1 \frac{1}{2}$

7. $\frac{3}{15}$ or $\frac{1}{5}$

8. $\frac{3}{7}$

9. $\frac{4}{8}$ or $\frac{1}{2}$

10. $\frac{13}{15}$

11. $\frac{5}{20}$ or $\frac{1}{4}$

12. $\frac{3}{8}$

13. $1 \frac{1}{10}$

14. $1 \frac{1}{8}$

15. $1 \frac{5}{14}$

16. $1 \frac{3}{6}$ or $1 \frac{1}{2}$

17. $1 \frac{8}{20}$ or $1 \frac{2}{5}$

18. $1 \frac{14}{20}$ or $1 \frac{7}{10}$

19. $\frac{4}{12}$ or $\frac{1}{3}$

20. $\frac{5}{15}$ or $\frac{1}{3}$

21. $\frac{4}{12}$ or $\frac{1}{3}$

22. $\frac{7}{30}$

23. $\frac{12}{18}$ or $\frac{2}{3}$

24. $\frac{10}{18}$ or $\frac{5}{9}$

25. $\frac{88}{100}$ or $\frac{22}{25}$

26.1 $55/100$

27.1 $12/100$ or $1 \frac{3}{25}$

28. $19/100$

29. $22/100$ or $11/50$

30. $91/100$

31.1 $12/16$ or $1 \frac{3}{4}$

32.1 $20/30$ or $1 \frac{2}{3}$

33.1 $12/24$ or $1 \frac{1}{2}$

34.1 $21/30$

35.2 $1/12$

36. $16/28$ or $4/7$

Mental Arithmetic 2

1. $11/12$

2. $2 \frac{2}{5}$

3. 1

4. $1 \frac{4}{12}$ or $1 \frac{1}{3}$

5. $1 \frac{12}{15}$ or $1 \frac{4}{5}$

6. 5

7. $\frac{6}{9}$ or $\frac{2}{3}$

8. $\frac{10}{15}$ or $\frac{2}{3}$

9. $\frac{4}{15}$

10. $\frac{1}{5}$

11. $\frac{5}{10}$ or $\frac{1}{2}$

12. $\frac{5}{25}$ or $\frac{1}{5}$

13. $\frac{4}{9}$

14. $\frac{21}{30}$

15. $\frac{1}{18}$

16. $\frac{1}{20}$

17. 1

18. $1 \frac{4}{12}$ or $1 \frac{1}{3}$

19. $\frac{6}{14}$ or $\frac{3}{7}$

20. $\frac{21}{30}$

21. $\frac{2}{25}$

22. $\frac{9}{18}$ or $\frac{1}{2}$

23. $\frac{5}{12}$

24. $\frac{5}{15}$ or $\frac{1}{3}$

25. $1 \frac{80}{100}$ or $1 \frac{4}{5}$

26. $54/100$ or $27/50$

27. $847/1000$

28. $28/100$ or $7/25$

29. $34/100$ or $17/50$

30. $325/1000$

31. $1 \frac{27}{30}$

32. 2

33. $1 \frac{24}{28}$ or $1 \frac{6}{7}$

34. $1 \frac{24}{32}$ or $1 \frac{3}{4}$

35. $1 \frac{1}{18}$

36. $1 \frac{14}{32}$ or $1 \frac{7}{16}$

ANSWERS FOR READING

Space Tourism

1. **Award 1 mark** for explaining that it is impossible for most people because it costs too much, e.g.

- *most people can't afford it*
- *it is too expensive.*

1 mark

2. **Award 1 mark** for answers that refer to floating down the tube (holding the cable).

1 mark

3. **Award 1 mark** for identifying any of the following activities, up to a maximum of **2 marks**:

1. look at Earth or space / admire the view, e.g.

- *admire unique views of Earth*
- *look at the outside of earth*
- *look down at Earth.*

2. experience weightlessness / activities associated with floating, e.g.

- *enjoy being weightless*
- *enjoy the endless entertainment of being weightless.*

3. space-walk, e.g.

- *do a space walk.*

Do not accept plausible experiences that are not derived from the text or are unconnected with space travel, e.g.

- *take photos of the moon / see what the Moon is made from*
- *I'd write a blog*
- *stay in a hotel.*

Up to 2 marks

4. **Award 1 mark** for (around £)14 million / (£)14m.

1 mark

5. **Award 1 mark** for answers referring to the fact that it can be seen from Earth, e.g.

- *You can see it from / on Earth.*

1 mark

6. **Award 1 mark** for answers recognising that she was the first female space tourist.

- *she was the first lady to have a holiday in space*
- *she was the first female tourist in space.*

Do not accept answers that say she was the first female (into space).

1 mark

7. **Award 2 marks** for all **three** correct.

Award 1 mark for **two** correct.

| | |
|---------------------------------|---|
| Where did she start her trip? | <ul style="list-style-type: none"> • <i>Russia</i> Do not accept Russian ISS or Earth |
| Where did she stay in space? | <ul style="list-style-type: none"> • <i>space station / ISS</i> |
| How long did she stay in space? | <ul style="list-style-type: none"> • <i>8 days</i> Do not accept 8 |

Up to 2 marks

8. **Award 1 mark** for either of the following:

1. *(Well) my friends*
2. *Everyone wants to know.*

Do not accept longer quotations from the text.

1 mark

9. **Award 2 marks** for answers that contain **both** an appropriate reference to Anousheh's positive attitude, inferred from the text, **and** development in the form of a relevant quote / example(s) of activities she did in space, e.g.

- *you can tell that she liked space because of all the fun things she wrote like floating about without any effort and lifting heavy things*
[positive attitude + examples of activities]
- *she enjoyed it because of all the wonderful advantages she kept on describing* [positive attitude + quote]
- *she felt wonderful being able to do somersaults and flying around*
[positive attitude + examples of activities].

Award 1 mark for identifying Anousheh's positive attitude inferred from the text, e.g.

- *she loved it / she felt it was wonderful.*

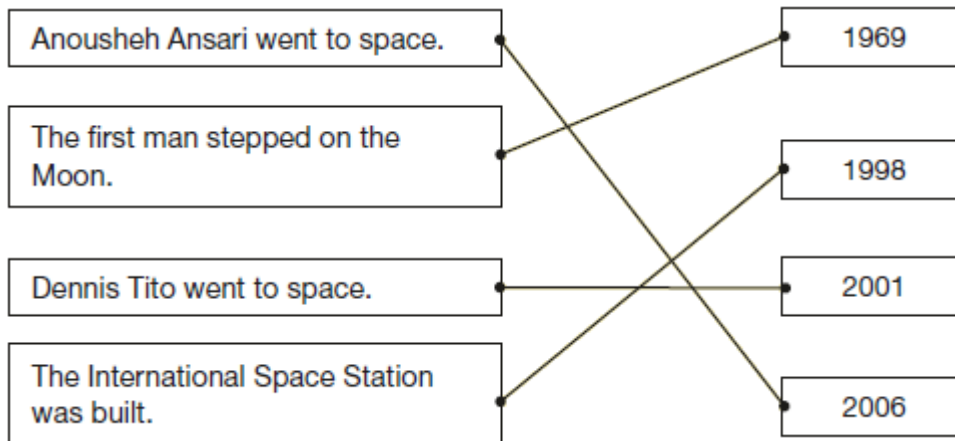
Also accept for 1 mark the following quotations (as they convey positive emotion), e.g.

- *she said being weightless had some wonderful advantages*
- *everything is effortless.*

Do not accept emotions that are not supported by the text, e.g. pride.

Up to 2 marks

10. **Award 1 mark** for all **four** pairs matched correctly.



1 mark

11. **Award 1 mark** for all **four** correct.

| | Fact | Opinion |
|---|------|---------|
| Anousheh Ansari kept an online diary. | ✓ | |
| Brushing your teeth in space is a joy. | | ✓ |
| Being weightless is endlessly entertaining. | | ✓ |
| Tourists can stay on the International Space Station. | ✓ | |

1 mark

12. **Award 1 mark** for either acceptable point:

1. the rock burns very quickly, e.g.
 - they burn quickly / suddenly / instantly
 - *it happens fast.*
2. the rock burns brightly, e.g.

- *when the rock burns you get a dazzling light.*

Do not accept reference to speed of travel, e.g.

- *they go / fly / travel very quickly.*

1 mark

13. **Award 1 mark** for the correct option ticked.

- set out.
- meet.
- pack up.
- plan.

1 mark

14. **Award 1 mark** for reference to any of the following acceptable points, up to a maximum of **2 marks**:

1. accessible location, e.g.

- *You don't have to travel far to do it*
- *You don't have to be in space (to see them)*
- *You don't have to leave Earth.*

2. you do not need specialist equipment, e.g.

- *You can do it with things you'll have in the house*
- *You don't need a telescope or binoculars*
- *You don't need any expensive equipment*
- *It sounds easy because all you need is a nice spot, a blanket, pillow and torch.*

3. you don't need an expert to show you how to do it, e.g.

- *You just need to go with an adult, they don't need to know anything about space.*

Do not accept answers that are focussed on the structure of page 6, e.g.

- *the instructions are laid out clearly.*

2 marks

15. **Award 1 mark** for all **four** correct.

| | True | False |
|---|------|-------|
| Take warm clothes, a blanket, a pillow and a torch. | ✓ | |

| | | |
|---------------------------------|--|---|
| Stay close to town. | | ✓ |
| Point your torch up to the sky. | | ✓ |
| You must have binoculars. | | ✓ |

1 mark

Giants

1. (a) **Award 1 mark** for reference to touching the snail's threads / stalks / eyes.

1 mark

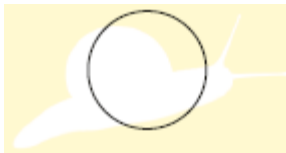
- (b) **Award 1 mark** for reference to picking the frog up / clutching it in his fist.

1 mark

2. **Award 1 mark** for answers where the pupil has circled one or both eyes, or eyes and eye stalks on the image of the snail, e.g.



Do not accept answers where the pupil has not circled the eyes, or where more than just the eyes (and stalks) are circled, e.g.



1 mark

3. **Award 1 mark** for answers that refer to concern / empathy, e.g.

- *sorry for it*
- *sympathy*
- *worried about it*
- *you'd want to protect it.*

Also accept answers that recognise the snail is being treated unfairly, e.g.

- *angry for it*

- *upset about what's happening to it.*

Do not accept answers that refer to the snail rather than the reader's feelings, e.g.

- *it's got a thin shell*
- *it's really delicate.*

1 mark

4. **Award 1 mark** for **two** of the following acceptable points:

1. (the speed or urgency with which) it retracts its eyes, e.g.
 - *it snatches its eyes back in.*
2. (the speed or urgency with which) it goes into its shell, e.g.
 - *it quickly disappears into its shell*
 - *it goes into its shell.*
3. it cowers
4. it quivers.

1 mark

5. **Award 1 mark** for the correct option ticked.

- | | |
|-----------|-------------------------------------|
| shiny. | <input type="checkbox"/> |
| soft. | <input type="checkbox"/> |
| delicate. | <input checked="" type="checkbox"/> |
| rough. | <input type="checkbox"/> |

1 mark

6. **Award 2 marks** for responses that interpret **both** emerald and scrap:

Acceptable points for **emerald**:

1. green
2. high value
3. sparkling / shiny

Acceptable points for **scrap**:

4. insignificance or smallness
5. fragility
6. worthless / disposable / rubbish, e.g.
 - *It shows that the frog is like a precious stone, but it's like a scrap of rubbish too. [AP2, AP6]*

- *Emerald tells us that the frog is green and scrap makes us realise that it is tiny and unimportant.* [AP1, AP4]
- *It's green and it's small.* [minimal AP1, AP4]

Award 1 mark for an interpretation of **either** emerald **or** scrap from one or more of the acceptable points, e.g.

- *Emerald scrap reminds us that the frog is insignificant.* [AP4]
- *It means the frog is little and worth nothing.* [AP4, AP6]
- *That it is a shimmery green.* [AP3, AP1]

Do not accept answers that repeat the idea that this expression describes the frog or that are vague / general, e.g.

- *It puts a clear picture in our minds*
- *It tells us what the frog looks like*
- *It means the frog is pretty / handsome / gross / horrible / ugly.*

2 marks

7. **Award 1 mark** for reference to the tremendous monster being a human.

Do not accept: *It is a giant.*

1 mark

8. **Award 1 mark** for **two** of the following acceptable points:

1. *trembling (throat)*
2. *shivering*
3. *dread.*

1 mark

9. **Award 1 mark** for the correct option ticked.

- People can learn a lot from holding small creatures.
- People should think about how their actions affect others.
- People are much bigger than frogs and snails.
- People should overcome their fear of nature.

1 mark

The Lost World

1. (a) **Award 1 mark** for the correct option indicated.

The story is told from the perspective of...

Professor
Summerlee

Lord John

Malone

Malone
Professor

1 mark

(b) **Award 1 mark** for the correct option indicated.

carefully

quickly

fearfully

noisily

1 mark

(c) **Award 1 mark** for the correct option indicated.

smaller

bigger

faster

slower

1 mark

(d) **Award 1 mark** for the correct option indicated.

regularly

randomly

carefully

equally

1 mark

2. **Award 1 mark** for: *(After a) few hundred yards.*

1 mark

3. **Award 1 mark** for reference to either acceptable point:

1. it is referred to as 'the unknown'

2. they entered cautiously.

Do not accept reference to it being overgrown.

1 mark

4. **Award 1 mark** for reference to providing a comparison to something the reader will recognise, e.g.

- *because we know how big elephants are*
- *we know what lizard's skin is like*
- *it compares them to animals we know.*

1 mark

5.

| Acceptable Points | Likely evidence (accept paraphrase) |
|-------------------|-------------------------------------|
| inoffensive | |

| | |
|--|---|
| 1. acted like children / playful | <ul style="list-style-type: none"> • <i>little ones played round their parents</i> • <i>unwieldy gambols</i> • <i>bounding into the air</i> |
| 2. they are herbivores / vegetarians | <ul style="list-style-type: none"> • <i>reaching a bunch of foliage</i> |
| 3. being together as a family / looking after their young | <ul style="list-style-type: none"> • <i>little ones played round their parents</i> • <i>followed by its mate and its three enormous infants</i> |
| 4. the men don't find them frightening / they don't harm the men | <ul style="list-style-type: none"> • <i>I do not know how long we stayed gazing</i> • <i>this marvellous spectacle</i> |
| 5. slow movement | <ul style="list-style-type: none"> • <i>slowly lurched</i> |
| brutes | |
| 6. strength | <ul style="list-style-type: none"> • <i>tore it down as if it had been a sapling</i> • <i>the strength of the parents seemed to be limitless</i> |
| 7. huge size | <ul style="list-style-type: none"> • <i>dull thuds</i> • <i>its three enormous infants</i> • <i>put his forelegs round the trunk of the tree</i> • <i>their heads high above the brushwood</i> • <i>tore it down as if it had been a sapling</i> • <i>lurched</i> |
| 8. the way they move | <ul style="list-style-type: none"> • <i>unwieldy gambols</i> • <i>dull thuds</i> • <i>lurched off</i> |

Award 3 marks for a response that identifies one acceptable point for inoffensive **and** one acceptable point for brutes, **both** with evidence, e.g.

- *it explains that the iguanodons were harmless because it says they eat foliage which means they are vegetarians. It also says 'I do not know how long we have stared at this spectacle' which means they hadn't tried to hurt them or kill them when most dinosaurs would have tried to kill them for food. They were like brutes because they were so strong and pulled out trees without any effort. [AP2 - inoffensive + ev, AP4 - inoffensive + ev and AP6 – brutes + ev]*
- *They were not offensive as they let the men stare at them for ages and they didn't attack them. But they were also like brutes as they were strong and pulled trees up really easily. [AP4 - inoffensive + ev and AP6 - brutes + ev]*

- *You could tell that they were inoffensive because they were playing. One of the parents was followed by its mate so they were friendly. It says they lurched which makes them sound big and heavy. [AP1, AP3 - inoffensive + ev, AP7 brutes + ev]*

Award 2 marks for a response that identifies one acceptable point for inoffensive **and** one acceptable point for brutes, **one** with evidence, e.g.

- *They were very strong as they could tear down a tree. And the children played lots of games [AP6 - brutes + ev and AP1 - inoffensive]*
- *They were moving really slowly because he says they lurched. They were also huge. [AP5 - inoffensive + ev and AP7 - brutes]*

Award 1 mark for **two** acceptable points, one for inoffensive **and** one for brutes or one acceptable point with evidence for either inoffensive **or** brutes, e.g.

- *They are vegetarians but they are really stron [AP2 - inoffensive and AP6 - brutes]*
- *It explains that the iguanodons are harmless by saying they eat foliage so they are vegetarians. Also the little ones play around in 'unwieldy gambols' giving a cute impression. [AP2 - inoffensive + ev, AP1- inoffensive + ev]*
- *They must have weighed a lot because they made dull thuds when they fell over. [AP7 - brutes + ev]*

Also accept, for a maximum of **1 mark**, relevant quotations taken from the paragraph without a link to an acceptable point, that evidence both inoffensive and brutes, e.g.

- *The little ones played round their parents in unwieldy gambols*
- *It calls them little ones and enormous infants*

Up to 3 marks

6. **Award 1 mark** for the correct option ticked.

- | | |
|----------|-------------------------------------|
| fast. | <input type="checkbox"/> |
| violent. | <input type="checkbox"/> |
| clumsy. | <input checked="" type="checkbox"/> |
| gentle. | <input type="checkbox"/> |

1 mark

7. **Award 1 mark** for: (my) comrades.

1 mark

8. **Award 1 mark** for one of the following acceptable points:

1. he knows what the *tracks* are / that they are dinosaur tracks

2. he is completely fascinated (*ecstasy*) by the iguanodons / the opportunity to study pre-historic life
3. he knows that they are iguanodons / that they once lived in England.

Do not accept he was a professor (he could be a professor of anything).

1 mark

9. **Award 2 marks** for **four** correct words and **1 mark** for **two** or **three** correct words from the list below:

1. gloom
2. menace
3. terrors
4. pounce
5. lair
6. crept.

Up to 2 marks

10. **Award 1 mark** for all four correct.

| | True | False |
|--|------|-------|
| Lord John saw the dinosaur tracks first. | ✓ | |
| Professor Summerlee has faked the evidence. | | ✓ |
| Professor Challenger worries that people won't believe them. | ✓ | |
| They are all frightened of the iguanodons. | | ✓ |

1 mark

11. (a) **Award 1 mark** for:

- *("I don't know what anyone else thinks, but this place) makes me feel very uneasy..." (said Lord John).*

1 mark

- (b) **Award 1 mark** for answers that refer to **both** his mood at the beginning **and** at the end of the extract.

Beginning:

Accept appropriate synonyms for: enthusiastic / excited / curious.

End:

Accept appropriate synonyms for: cautious / scared / anxious.

1 mark

12. **Award 2 marks** for an acceptable point supported by text-based evidence.

Award 1 mark for either an acceptable point or a relevant piece of text-based evidence.

| Acceptable points (can be implied) | Evidence |
|------------------------------------|--|
| 1. death / attack / threat | <i>feelings of danger gloom constant menace terrors pounce iguanodons lair</i> |
| 2. lost | <i>gloom shady foliage rocks</i> |
| 3. discovering other dinosaurs | <i>other creatures constant menace terrors the iguanodons we had seen lair gloom</i> |

Examples of 2 mark responses:

- *A vicious beast is going to eat them later on because it says there is a constant menace therefore they may not get to confirm to England that they were real dinosaurs.*
- *I think they will journey on to try to locate some more creatures, for in the text it says 'what other creatures might there not be ready to pounce upon us from their lair among the rocks and brushwood'*
- *It says 'but what other creatures might there not be there ready to pounce upon us from their lair among the rocks or brushwood?' which implies that something might jump out and attack them*
- *They were in a dangerous place and suddenly a dinosaur will pounce from behind a rock and grab one of them and eat him.*

Examples of 1 mark responses:

- *They got lost and stayed there and became friends with the Iguanodons*
- *They might be pounced on.*

Do not accept general answers not relating to specific events or actions, e.g.

- *It's going to be dangerous*
- *They carry on exploring.*

Do not accept textual evidence that is not taken from the last paragraph, e.g.

- *They will find more footprints and follow them.*

Do not accept predictions not supported by the last paragraph, e.g.

- *They catch some dinosaurs and take them back to England.*

Up to 2 marks