

Test 3 answer key with extra explanations

Reading

Reading Passage 1

Questions 1–13

1 The correct answer is FALSE: The text says, ‘The Romans were not traditionally sailors but mostly land-based people, who learned to build ships from the people that they conquered, namely the Greeks and the Egyptians.’ In other words, the Romans picked up their shipbuilding skills *from* the Greeks and the Egyptians: they did not pass these skills on to these people.

2 The correct answer is NOT GIVEN: The text mentions the change to the ‘mortise and tenon’ method of fixing planks but does not say whether skilled craftsmen were needed for this.

3 The correct answer is FALSE: The text says, ‘Mediterranean shipbuilders shifted to another shipbuilding method, still in use today, which consisted of building the frame first and then proceeding with the hull and the other components of the ship.’ In other words, their practice involved building the frame before the hull.

4 The correct answer is TRUE: The text says, ‘Rome’s navy became the largest and most powerful in the Mediterranean, and the Romans had control over what they therefore called *Mare Nostrum*, meaning “our sea”’. This means that Romans gave the Mediterranean this name because they dominated its use.

5 The correct answer is TRUE: The text says that rowers were ‘mostly Roman citizens enrolled in the military’.

6 The correct answer is ‘lightweight’: In the third paragraph, the text says, ‘Warships were built to be lightweight and very speedy’. **‘Speedy’ is incorrect:** The summary already says that warships were designed so that they moved quickly; ‘speedy’ has the same meaning as this.

7 The correct answer is ‘bronze’: In the third paragraph, the text says, ‘They had a bronze battering ram’. **‘Timber’ is incorrect:** This refers to the hulls of enemy ships.

8 The correct answer is ‘levels’: In the fourth paragraph, the text refers to the ‘trireme’ and then says, ‘It had rowers in the top, middle and lower levels’.

9 The correct answer is ‘hull’: In the fifth paragraph, the text says that merchant ships ‘had a wider hull, double planking and a solid interior for added stability’. The word broad has the same meaning as ‘wide’. **‘Interior’ is incorrect:** the text says that the interior was ‘solid’, not that it was wide.

10 The correct answer is 'triangular': In the fifth paragraph, the text says that merchant ships had 'one to three masts with large square sails and a small triangular sail at the bow'. **'Large' is incorrect:** the gap requires a word describing the shape of the sails, contrasting with 'square' and referring to the other type of sail ('small triangular').

11 The correct answer is 'music': In the fifth paragraph, the text says that 'coordinating the hundreds of rowers ... was not an easy task' and then says, 'In order to assist them, music would be played on an instrument, and oars would keep time with this.'

12 The correct answer is 'grain': In the sixth paragraph, the text says, 'The cargo on merchant ships included raw materials, (e.g. iron bars, copper, marble and granite), and agricultural products, (e.g. grain from Egypt's Nile valley).'

13 The correct answer is 'towboats': In the sixth paragraph, the text says, 'Large merchant ships would approach the destination port and, just like today, be intercepted by a number of towboats that would drag them to the quay.' The phrase 'drag them to the quay' means that these small boats pulled the merchant ships to the shore.

Questions 14–26

14 The correct answer is D: The text says, ‘Hunters would have easily misplaced arrows and they often discarded broken bows rather than take them all the way home.’ This sentence gives two reasons why hunters left weapons in the mountains: it explains about arrows that were ‘misplaced’ – in other words, lost – and bows that hunters threw away because they were broken. **A is incorrect:** Section A refers to ancient arrows being found on mountains, but it does not explain why they were left there.

15 The correct answer is C: The text quotes Barrett saying, ‘Fieldwork is hard work – hiking with all our equipment, often camping on permafrost’. The term ‘fieldwork’ refers to the work of archaeologists when they go to excavate ancient sites looking for evidence. **F is incorrect:** Section F mentions the difficulty of travelling in the mountains, but this refers to travel in the ancient past: it does not refer to present-day archaeological expeditions.

16 The correct answer is F: The text quotes Barrett referring to ‘failing agricultural harvests in time of low temperatures’ and then says, ‘A colder turn in the Scandinavian climate would likely have meant widespread crop failures’. These are both explanations about the climate becoming too cold to grow food successfully.

17 The correct answer is H: The text says that ‘archaeologists could be extracting some of those artefacts from retreating ice in years to come’. The phrase ‘in years to come’ means in the future.

18 The correct answer is G: The text refers to ‘a booming demand for hides to fight off the cold, as well as antlers to make useful things like combs.’ Hides (animal skins) and antlers are examples of two animal products which people needed and which hunters would have traded. **C and E are not correct:** Sections C and E mention trade but do not give any examples of items.

19 The correct answer is B: The text says, ‘glacial archaeologists need to race the clock to find newly revealed artefacts, preserve them, and study them’. The idiom ‘race against the clock’ refers to the pressure to do something quickly before time runs out. The text then gives two examples explaining why they have to work quickly: ‘If something fragile dries and is windblown it might very soon be lost to science, or an arrow might be exposed and then covered again by the next snow’. **C is incorrect:** Section C refers to how hard archaeologists’ work can be, but makes no mention of the pressure to work quickly.

20 The correct answer is ‘microorganisms’ or ‘micro-organisms’: In Section B, the text says, ‘Organic materials like textiles and hides are relatively rare finds at archaeological sites. This is because unless they’re protected from the microorganisms that cause decay, they tend not to last long.’ The term ‘hides’ is another word for animal skins.

21 The correct answer is 'reindeer': In Section C, the text refers to 'patches of ice in Oppland' and then says, 'Reindeer once congregated on these icy patches in the later summer months'. The word 'congregated' means came together in groups, so has a similar meaning to gathered. **'Insects' is incorrect:** The text does not say that the insects were trying to avoid anything. **'Hunters' is incorrect:** The text does not say that hunters gathered or that they were trying to avoid anything.

22 The correct answer is 'insects': In Section C, the text refers to reindeer congregating on the mountains of Oppland in summer 'to escape biting insects'. This means that they went up to the mountains to avoid being attacked by the insects. **'Reindeer' is incorrect:** The text says that the reindeer were trying to avoid the insects, not that the insects were trying to avoid the reindeer. **'Hunters' is incorrect:** The text does not say that the reindeer were trying to avoid hunters.

23 and 24 The correct answers are B and C: In Section F, the text says, 'But it turned out that hunters kept regularly venturing into the mountains even when the climate turned cold': this has the same meaning as statement B. In Section E, the text refers to some periods which produced lots of artefacts, indicating that people were active at those times and then says, 'But there were few or no signs of activity during other periods': this means that there were few or no artefacts in these other periods.

A is incorrect: In Section D, the text mentions tools and horse tack (horse equipment) as examples of artefacts other than skis which were found in high mountain passes. **D is incorrect:** Radiocarbon dating is mentioned in Section E, but the text does not say anything about results being inaccurate. **E is incorrect:** The text does not compare the number of artefacts found in Oppland with those found in other sites.

25 and 26 The correct answers are A and C: In Section G, the text refers to 'a booming demand for hides to fight off the cold, as well as antlers to make useful things like combs. Business must have been good for hunters.' The phrase 'a booming demand' has the same meaning as an increased demand. This section also says, 'Although we usually think of ships when we think of Scandinavian expansion, these recent discoveries show that plenty of goods travelled on overland routes, like the mountain passes of Oppland.' This means that not all Viking goods were transported by ship: some were transported by land.

B is incorrect: The text does not say when the greatest growth in the wealth of the Vikings occurred. **D is incorrect:** The text does not say where traders of this time came from. **E is incorrect:** The text does not say which area the Vikings were interested in with regard to trading links.

Questions 27–40

27 The correct answer is NOT GIVEN: In Section A, the text refers to the Cambridge scientists' discovery and the publication of their findings, but does not mention other scientists' reaction to this.

28 The correct answer is TRUE: In Section D, Dr Philip Wigge refers to the target for 2050 and then says, 'but climate change is a major threat to achieving this.' If there is a major threat to achieving something, this means that it might not be achieved.

29 The correct answer is TRUE: In Section D, the text says, 'Key crops such as wheat and rice are sensitive to high temperatures. Thermal stress reduces crop yields by around 10% for every one degree increase in temperature'. If crop yields are reduced, this means that the crops suffer when temperatures increase.

30 The correct answer is NOT GIVEN: There is no mention of the possibility of developing crops that require less water.

31 The correct answer is FALSE: In Section E, the text says, 'During the day, sunlight activates the molecules, slowing down growth. If a plant finds itself in shade, phytochromes are quickly inactivated – enabling it to grow faster to find sunlight again.' This means that plants grow more slowly in sunlight than in shade.

32 The correct answer is FALSE: In Section E, the text says, 'At night, however, it's a different story. Instead of a rapid deactivation following sundown, the molecules gradually change from their active to inactive state.' This means that phytochromes change their state at different speeds day and night: in the daytime, they become active or deactivated quickly, depending on light levels; by night, they change slowly, depending on temperature.

33 The correct answer is H: The text quotes Wigge saying, 'we have outstanding collaborators nearby who work on more applied aspects of plant biology, and can help us transfer this new knowledge into the field'. This means that the collaborators' specialised knowledge of plant biology can help the researchers take their findings out of the lab, so that they can be used in 'the field' – a wider, real-world context.

34 The correct answer is D: The text quotes Wigge saying, "Discovering the molecules that allow plants to sense temperature has the potential to accelerate the breeding of crops resilient to thermal stress and climate change.' If the researchers' discovery can speed up the development of crops that don't suffer in rising temperatures, this would be a potential benefit.

35 The correct answer is G: The text quotes the well-known rhyme, 'oak before ash we'll have a splash, ash before oak we're in for a soak', followed by Wigge's explanation about why this traditional saying has a scientific basis.

36 The correct answer is C: The text says, 'Farmers and gardeners have known for hundreds of years how responsive plants are to temperature: warm winters cause many trees and flowers to bud early, something humans have long used to predict weather and harvest times for the coming year.' This sentence mentions trees and flowers budding early as an example of plant behaviour, and says that people have long used this as an indication of future conditions: for example, in helping farmers to plan when their crops will need to be harvested. If something has been known for hundreds of years or if people have 'long' done something, this means that it has been done 'traditionally'.

37 The correct answer is A: The text refers to 'The new findings, published in the journal *Science*'. If researchers publish their findings in a journal, this where their research is reported.

38 The correct answer is 'warm (winter)': In Section G, the text says that 'species, such as daffodils, have considerable temperature sensitivity, and can flower months in advance during a warm winter'.

39 The correct answer is 'summer': In Section G, the text says, 'A warmer spring, and consequently a higher likeliness of a hot summer, will result in oak leafing before ash. A cold spring will see the opposite. As the British know only too well, a colder summer is likely to be a rain-soaked one.' The phrase 'a cold spring will see the opposite' means that a cold spring will result in ash trees coming into leaf before oak trees, and that there will also be a higher chance of a cold and 'rain-soaked' (wet) summer.

40 The correct answer is 'mustard plant(s)' or 'mustard': In Section H, the text says, 'The work was done in a model system, using a mustard plant called *Arabidopsis*.'