

READING PASSAGE 3

You should spend about 20 minutes on **Questions 27-40**, which are based on Reading Passage 3 below.

Whale Culture

- A** Most social scientists stubbornly resist the idea that animals have culture. Even such advanced cetacean mammals as whales and dolphins clearly don't have art, literature, or architecture. But patient observation over many years has begun to reveal behaviours that can only be learnt from other whales. And that, say whale biologists, constitutes culture.
- B** So far, humpback and killer whales provide the best evidence of culture in cetaceans, and the song of the male humpback is among the most striking examples. Humpback populations in different oceans sing different songs, but within the same ocean they all stick to the same one. However, during the breeding season the sounds change, as it appears that females are drawn to novel songs. One male might add an extra set of groans; another might drop a series of grunts. Soon all the other males have altered their own rendition to incorporate the changes until they are once again singing the same song. Since this occurs among thousands of whales spread across a vast part of the planet, the change cannot be in response to any factor in the animal's environment. The latest version of the song can be learnt only from other whales – almost certainly by imitation.
- C** Culture plays an even bigger part in the life of killer whales. Nowhere is this more obvious than along the north-west coast of America, where killer whales are split into two distinct populations – 'residents' and 'transients'. They live in the same stretch of water, but they don't mingle. In effect, they belong to two quite separate cultures. Residents live in stable groups, or 'pods', made up of two or three mothers and their offspring – perhaps 20 whales in all. Calves stay with their mothers throughout adulthood, and in many years of observation no one has ever seen a whale switch pods. Transients travel in smaller, more changeable groups of between three and six.
- D** One of the most obvious distinctions between the transient and resident societies is the way they impart information. Killer whales detect prey with a range of echo-locating clicks, but converse with a vocabulary of squeaks, whistles and whines. Transients have only a few such calls, and all transient societies share the same ones. Residents have a much more extensive repertoire, and each family group has its own unique and distinctive set of calls. Despite regular interaction between them, each resident pod sticks firmly to its own dialect. Research shows these dialects are maintained for at least 40 years.

- E** To qualify as part of killer whale culture, dialects must be learnt from other members of the pod. Animals with different dialects share the same waters, so the variation can't be a product of physical environment. 'And we can throw out the notion that dialects are inherited,' says Lance Barrett-Lennard of the University of British Columbia. He has spent the past seven years analysing DNA from 270 whales. His paternity tests reveal that female killer whales invariably attract mates from outside their own pod – males with a very different dialect. If dialects were programmed by genetics, call patterns from both father and mother would be passed on to the calf. 'A calf uses the calls of its maternal pod very precisely. There's no input from the father,' says Barrett-Lennard.
- F** The question still remains – is this culture? It is, according to Frans de Waal of Emory University in Atlanta, who argues that culture is just another biological adaptation that has evolved in many creatures. One benefit of viewing culture in this way is that you can start to understand how and why it might have arisen in these creatures. Whales have several biological attributes that give them an advantage in social learning. Apart from their advanced mental abilities, they are adept at recognising sounds: ideal for communicating in the marine environment. Many species spend years rearing their offspring, and live in small, stable, multi-generational societies, a social system that provides ample opportunity for teaching and learning.
- G** But why have cetaceans evolved the ability to learn from other group members? Experts in whale biology believe that ecological factors and the need to adapt to sudden changes in the environment played a large part in the emergence of culture. Although the ocean is a relatively stable habitat in many ways, it is highly changeable in one crucial respect – the availability of food. One moment there might be a plentiful supply of fish, the next they've disappeared. When that happens, the past experience of senior members of the group – and the ability to share this knowledge – is a huge asset. The dialects of killer whales allow members of the group to identify each other, enabling them to share information about food hot spots. Among resident killer whales, it also allows females to avoid inbreeding by picking out a mate with a strange dialect from outside their pod, says Barrett-Lennard.
- H** The importance of sharing information seems to have led to biological changes in at least some species of whale. Female killer whales, like humans, are very unusual in that they live up to a quarter of a century after they have had their descendants. And what whale matriarchs offer is the most important thing of all – cultural knowledge, vital for the group's survival, passed directly from one generation to the next.

Questions 27–31

Do the following statements agree with the views of the writer in Reading Passage 3?

In boxes 27–31 on your answer sheet, write

YES	<i>if the statement agrees with the claims of the writer</i>
NO	<i>if the statement contradicts the claims of the writer</i>
NOT GIVEN	<i>if it is impossible to say what the writer thinks about this</i>

- 27** Resident killer whales appear to remain with their maternal group for life.
- 28** Resident killer whales have a more restricted range of calls than transients.
- 29** There is a vocabulary of sounds which is common to all transient killer whales.
- 30** Resident killer whales share the dialects of other resident communities living in the same waters.
- 31** The dialects of transient killer whales remain constant over time.

Questions 32–34

Complete the summary below.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer.

Write your answers in boxes 32–34 on your answer sheet.

It has been observed that resident killer whales invariably live in fixed family groups, known as **32** _____. Each of these has its own unique set of calls, despite close contact with other family groups. As the same areas of ocean contain many different groups with widely varying dialects, it is clear that these differences could not have emerged as a result of the whales' **33** _____.

According to tests conducted by Lance Barrett-Lennard, a calf communicates exclusively with the dialect of the group to which its **34** _____ belongs. Barrett-Lennard also rejects the idea that the call patterns are inherited.

Questions 35–37

Choose **THREE** letters, **A–F**.

Write the correct letters in boxes 35–37 on your answer sheet.

Which **THREE** of the following features of whales are mentioned in the passage?

- A** intelligence
- B** physical strength
- C** sensitivity to sound
- D** prolonged life span
- E** lengthy period of fertility
- F** adaptability to a variety of foods

Questions 38–40

Reading Passage 3 has eight paragraphs, **A–H**.

Which paragraph contains the following information?

Write the correct letter, **A–H**, in boxes 38–40 on your answer sheet.

- 38** an example of the kind of information passed by whales to each other
- 39** a reference to variations in communication styles between different cultures within one species
- 40** ways in which the skills of whales are favourable for the development of culture

判断题 (27–31)

题号	答案	精准定位句	解析 (同义改写 & 陷阱排除)
27	YES	第C段: “Residents live in stable groups... Calves stay with their mothers throughout adulthood, and ... no one has ever seen a whale switch pods.”	题干“remain with their maternal group for life”≈文中“throughout adulthood + never switch pods”。“appear to”与“多年观察未见换群”一致, 为肯定。
28	NO	第D段: “Transients have only a few such calls... Residents have a much more extensive repertoire.”	题干说“居民群更受限 (more restricted)”, 原文恰好相反: 过客群 (transients) 更少, 居民群更“广泛”。故相反。
29	YES	第D段: “Transients have only a few such calls, and all transient societies share the same ones.”	题干“common to all transient killer whales”=原文“all transient societies share the same ones”。语义一致, 故是。
30	NO	第D段: “Despite regular interaction... each resident pod sticks firmly to its own dialect.”	题干称居民群“share the dialects”, 原文强调各居民群坚持各自方言, 不共享; 与题干矛盾。
31	NOT GIVEN	全文未述	题干问“transient 方言是否随时间保持不变”。文中仅说其呼叫“很少、且各群相同”。未涉及“随时间变化/恒定”的信息。故未给出。

摘要填空 (32–34)

题号	答案 (≤ 两词)	精准定位句	解析
32	pods	第C段: “Residents live in stable groups, or ‘pods’ ...”	“固定家族群”在文中专称为 pods。
33	physical environment	第E段: “...the variation can’t be a product of physical environment.”	摘要说差异“不可能由.....导致”, 与原文完全同词同义。
34	mother	第E段: “A calf uses the calls of its maternal pod very precisely. There’s no input from the father.”	摘要结构“the group to which its ____ belongs”→“小鲸只使用母系群的方言”, 因此空格应为 mother (而非 maternal pod, 语法上应填“其母亲所属的群”)。

多选题 (35–37)——从 A–F 中选 三项

正确选项	精准定位	解释
A intelligence	第 F 段：“ <i>Apart from their advanced mental abilities ...</i> ”	“advanced mental abilities”=高智力 / 智能。
C sensitivity to sound	第 F 段：“ <i>they are adept at recognising sounds: ideal for communicating in the marine environment.</i> ”	对声音敏感、能分辨识别声音。
D prolonged life span	第 H 段：“ <i>Female killer whales... live up to a quarter of a century after they have had their descendants.</i> ”	说明寿命很长，尤其是绝经后仍长期存活。

错误项排除：

- B physical strength：全文未提体力 / 力量。
- E lengthy period of fertility：相反，H 段强调绝经后仍长期存活，非“生育期很长”。
- F adaptability to variety of foods：G 段提到食物供给变化与“分享食物热点信息”，但未说“对多种食物的适应性”，概念不同。

段落信息匹配 (38–40)

题号	答案	精准定位句	解析
38	G	第 G 段：“... <i>enabling them to share information about food hot spots.</i> ”	“传递的信息类型示例”=食物热点位置，G 段给出具体例子。
39	D	第 D 段：“ <i>Transients have only a few such calls... Residents have a much more extensive repertoire... each resident pod sticks firmly to its own dialect.</i> ”	同一物种内部（居民 vs 过客 & 各居民群）沟通方式差异的明确信息。
40	F	第 F 段：“ <i>Whales have several biological attributes that give them an advantage in social learning... advanced mental abilities; adept at recognising sounds; ... live in small, stable, multi-generational societies...</i> ”	直接罗列有利于文化发展的能力与社会结构。

38 题争议题解析（G vs H）

- 第 G 段 关键句：
“the dialects of killer whales allow members of the group to identify each other, **enabling them to share information about food hot spots.**”（第 G 段）
这里不仅谈“分享信息”，而且给出了具体示例——食物热点（food hot spots）。这正对应题干里的“an example of the kind of information”（信息类型的例子）。
- 第 H 段 关键句：
“The importance of sharing information seems to have led to biological changes ... what whale matriarchs offer is ... **cultural knowledge**, passed ... from one generation to the next.”（第 H 段）
H 段强调的是分享信息的重要性以及“文化知识”的代际传承，属于概念性 / 抽象性表述，并没有给出一种具体的信息内容（例如食物位置、迁移路线等的明确例子）。

题干 38 要求的是：

“an **example** of the kind of information passed by whales to each other”
关键词是 **example** (例子)。在出题逻辑里，看到 *for example / such as / share information about ...* 这类信号词，通常就是要你锁定具体实例。因此，能满足这一点的是 G 段的“**food hot spots**”，而 H 段只是说“文化知识”被代际传递——并非“某种信息的实例”。

结论

- 38 = G（“食物热点”的信息是明确的实例）
- 选择 H 的常见误区：容易被“passed directly from one generation to the next（代际传递）”吸引，以为凡是“传递”相关都行，但题目要“例子”，而 H 段缺少具体化内容。