



CASE 01A: The Spit Nest: Bodily Substances Worth a Fortune

Open the case. Decode the signals. Prove the truth.

First reaction:

This bird's nest is made from saliva.

One word I would use at first is: _____.

I chose this because: _____.

Signal Check: Are we ready to open the evidence?

1. What does **struct** signal?

- A. break
- B. carry
- C. hear
- D. build

2. Which word means something **built** or arranged?

- A. commodity
- B. saliva
- C. structure
- D. risk

3. What does **bio** help us understand in biological structure?

- A. it is linked to money
- B. it is linked to living things
- C. it is linked to buildings
- D. it is linked to danger

4. Which word means to **take** or pull something out?

- A. protect
- B. construct
- C. inspect
- D. extract

5. Which is the most **accurate** sentence?

- A. The swiftlet constructs its nest from saliva.
- B. The swiftlet extracts its nest from humans.
- C. The swiftlet is a commodity because it is a bird.
- D. The nest is biological because it is expensive.

Evidence Card Sort: Hardest Choice

At least one card could fit in more than one place. The hardest choice was: _____.

It could belong in both places because..._____.



CASE 01: Bodily Substances Worth a Fortune

Evidence Brief A: The Spit Nest

When does natural wonder become a commodity, and what gets put at risk?

Decode the signals:

struct =
build

construct
structure

bio = life
biological

ex = out
extract

tract = pull /
draw
extraction

The first clue in this case is something most people notice only when it disappears: saliva. Anyone who has had a bad cold, felt nervous before speaking, or gone too long without a drink knows how uncomfortable a dry mouth can be. Saliva helps us swallow. It helps us speak. It helps us taste food. It even begins digestion before food has reached the stomach.

For humans, saliva is useful but ordinary. For one tiny bird, it is extraordinary. Across parts of Southeast Asia, the edible-nest swiftlet uses saliva to **construct** its nest. It does not build with twigs, grass, leaves or mud. Instead, the bird produces a sticky thread from its mouth. Layer by layer, that thread dries and hardens into a pale, curved **structure** fixed to the wall.

This material is sometimes described as salivary cement. That phrase opens the case. Salivary means linked to saliva. Cement suggests something that joins, fixes or hardens. In other words, the swiftlet does not just produce saliva for the usual reasons. It turns saliva into **structure**. At first, this sounds almost impossible. A nest is usually something we imagine as soft, twiggy and hidden in a tree. The swiftlet's nest is different. It is a **biological structure**: something built by a living creature from material produced by its own body.

The case changes when humans enter it. Humans have learned to harvest these nests and use them in food, especially bird's-nest soup. In some places, the nests are treated as rare and valuable. A substance that begins inside a bird's body can become a luxury commodity: something people buy, sell and trade.

The swiftlet does not construct its nest for humans. It **constructs** it as part of its own life cycle. Yet human demand can pull the nest into a wider system of value, **extraction** and risk. Once that happens, the nest is no longer only a natural **structure**. It becomes evidence of a wider human system.

So the question is not simply, "Is this disgusting or fascinating?" The case question becomes this: what happens when something a living creature needs becomes something humans want?

Evidence clues:

Precision checkpoint

Word parts are clues. Check the full sentence before deciding meaning.

Case shift

The brief moves from ordinary saliva to rare structure, then to trade, value and risk.

Key sentence

The swiftlet does not construct its nest for humans.

This sentence changes the case: the nest belongs to the bird's life cycle before it enters a human market.

Hidden system:

living body → biological structure → rarity → human demand → extraction → risk

Stop and Prove: Session A Comprehension

1. **What does saliva help humans do?** Give two examples.

1. _____
2. _____

2. **What does the edible-nest swiftlet use to construct its nest?** _____

3. **Why is the nest described as a biological structure?**

The nest is a biological structure because... _____

4. **Which words show that the case has moved from nature into a human system?**

Choose two:

saliva · construct · valuable · harvest · digestion · speak

5. **Complete the sentence:**

Although the nest begins as part of the swiftlet's life, humans... _____

Challenge:

Why is the word **structure** more precise than **thing** in this case? _____

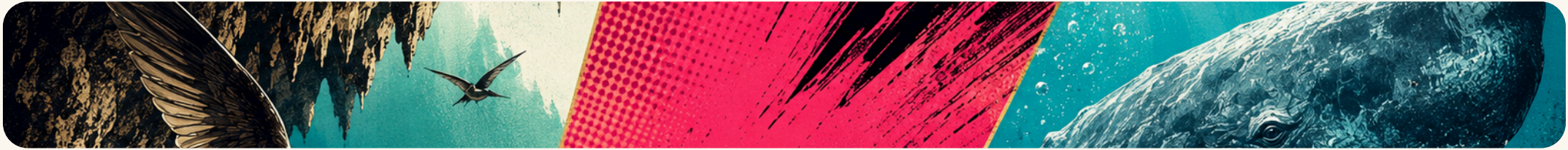
Explain how ordinary saliva becomes a biological structure, and why human demand can create risk.

Big idea: Ordinary saliva can become... _____

Write the Case Note

constructs · structure
· demand · risk

Log the Case: Natural wonder becomes human risk when... _____



CASE 01B: Ambergris: Bodily Substances Worth a Fortune

Open the case. Decode the signals. Prove the truth.

Reopen the Case

Signal Check: Before we open new evidence

1. **What does struct signal?**

A. carry B. build / arrange C. hear D. break

2. **What does bio signal?**

A. life / living things B. money C. danger D. stone

3. **What does ex signal?**

A. under B. again C. out D. across

4. **What does tract signal?**

A. pull / draw B. light C. water D. speak

5. **Which word means “taking or pulling something out”?**

A. construct B. extraction C. biological D. commodity

Recover the Pattern

living body → biological _____ → rarity → human _____ → extraction → _____

Missing words:

demand · risk · structure

Key Sentence from Session A

The sentence that changed the case was:

It matters because:

Before the new evidence:

A dramatic label can be memorable, but it may not tell the full truth.

CASE 01: Bodily Substances Worth a Fortune

Evidence Brief B: Ambergris - The Lump That Became Luxury

When does natural wonder become a commodity, and what gets put at risk?

Decode the signals:

bio = life
biological
substance

ex = out
tract = pull /
draw
extract

struct =
build /
arrange
structure

trans +
form =
trans + form
= change
form

transformation
= a
significant
change

Imagine finding a dull lump on a beach. It does not glitter. It does not look rare. It might be grey, waxy, cracked, pale, dark, or rough from years at sea. One person might mistake it for stone. Another might think it was old wax, sea rubbish, or something too unpleasant to touch. But to someone who knows what to look for, that lump could be worth a fortune. Its name is ambergris.

Ambergris is often nicknamed “whale vomit”. The nickname is memorable, and many people still use it, but it does not explain the whole truth. Ambergris is a rare, waxy substance linked to sperm whales. It is thought to form inside the whale’s digestive system, probably around hard parts of the whale’s diet, such as squid beaks. Ambergris is not a **biological structure** like the swiftlet’s spit nest. It is not **constructed** as a home or shelter. It is a **biological** substance: material formed inside a living body.

For centuries, people were unsure what ambergris really was. Some thought it came from the sea itself. Others imagined it was foam, wax, fungus, clay, or a strange mineral from the deep. Its mystery mattered. Ambergris was rare, difficult to identify and difficult to find.

Then comes the **transformation**. Fresh ambergris can smell unpleasant. But after years in salt water, sunlight and air, its colour, texture and scent can alter. It may become harder, paler and more fragrant. The sea does not just carry it; the sea changes it. That change helps explain why perfume-makers once prized ambergris. It could act as a fixative: a substance that helps a scent last longer. High-quality ambergris has been reported at around £18–£20 per gram, which means a single kilogram could be worth roughly £18,000–£20,000. So its value did not come from being disgusting. Its value came from rarity, **transformation** and use.

Once humans understood that ambergris could be valuable, the lump entered a different world. A strange substance linked to a whale’s body became a commodity: something people buy, sell and trade. This is where the moral problem begins. Finding ambergris washed ashore is not the same as harming a whale to **extract** something valuable. That difference matters. A complicated truth should not be flattened into a simple story.

But markets can still change how people see the natural world. When a rare animal substance becomes profitable, the living creature can disappear behind the prize. Demand can create secrecy. Secrecy can create risk. Rules may be needed because value can turn wonder into **exploitation**.

Ambergris shows how quickly language and value can change a thing. A lump becomes treasure. A substance becomes a commodity. A hidden process inside a living body becomes part of human desire. The real question is not, “Is ambergris disgusting?”

The real question is: what changes when humans put a price on something the hidden world produces?

Reading Lens:

Test the nickname:
What does “whale vomit” miss?

Find the value clue:
Why did perfume-makers want it?

Mark the turn: Where does the object become a commodity?

Precision note:
Ambergris is a substance, not a structure.

Hidden system:

living body → biological substance → transformation → human demand → commodity → risk

Evidence Questions: Work Like a Case Reader

Use the evidence brief.
Find the words that prove your answer.

1. What is ambergris linked to?

- A. swiftlets
- B. cave minerals
- C. sea plants
- D. sperm whales

2. Which sentence is most precise?

- A. Ambergris is a biological structure.
- B. Ambergris is a biological substance.
- C. Ambergris is constructed as a shelter.
- D. Ambergris is made by humans.

3. Use the signals: bio and struct

Explain why ambergris is a biological substance, not a biological structure.

Ambergris is a biological substance because... _____

It is not a biological structure because... _____

4. What does ambergris probably form around?

Write one short answer.

5. Which phrase best explains trans + form in this case?

- A. pulled out of a living thing
- B. changed in colour, texture and scent
- C. built into a shelter
- D. sold for money

6. Track the transformation

Fresh ambergris may smell _____
_____.

After years in salt water, sunlight and air, it can become harder,
paler and more _____
_____.



8. Where does exploitation begin in this case?

- A. When profit makes people see the prize before the living creature.
- B. When people mistake ambergris for stone.
- C. When ambergris smells unpleasant.
- D. When the sea changes ambergris.

Challenge question

Explain the difference between use and exploitation in this case.

7. Commodity Check

Which sentence best shows that ambergris has become a commodity?

- A. It may look like stone, wax or rubbish.
- B. It is thought to form inside a whale's digestive system.
- C. It became something people could buy, sell and trade.
- D. It can change after years in salt water, sunlight and air.



You Do Writing: Prove the Fuller Truth



The label “whale vomit” is **dramatic**, but it does not tell the whole case.

Write **one paragraph** explaining how a bodily substance or structure can become valuable, and why that value can create risk.

Use evidence from: the spit nest · ambergris

Include precise vocabulary: biological substance · biological structure · transformation · commodity · risk or exploitation

Challenge: use however or although to show the moral turn.

Plan before you write

Big idea:

A dramatic label can...

Spit nest evidence:

Ambergris evidence:

Judgement: **However**, the risk begins when...

Write your paragraph

Case Closed

Not everything valuable was made for humans.

Precise words reveal the fuller truth because...