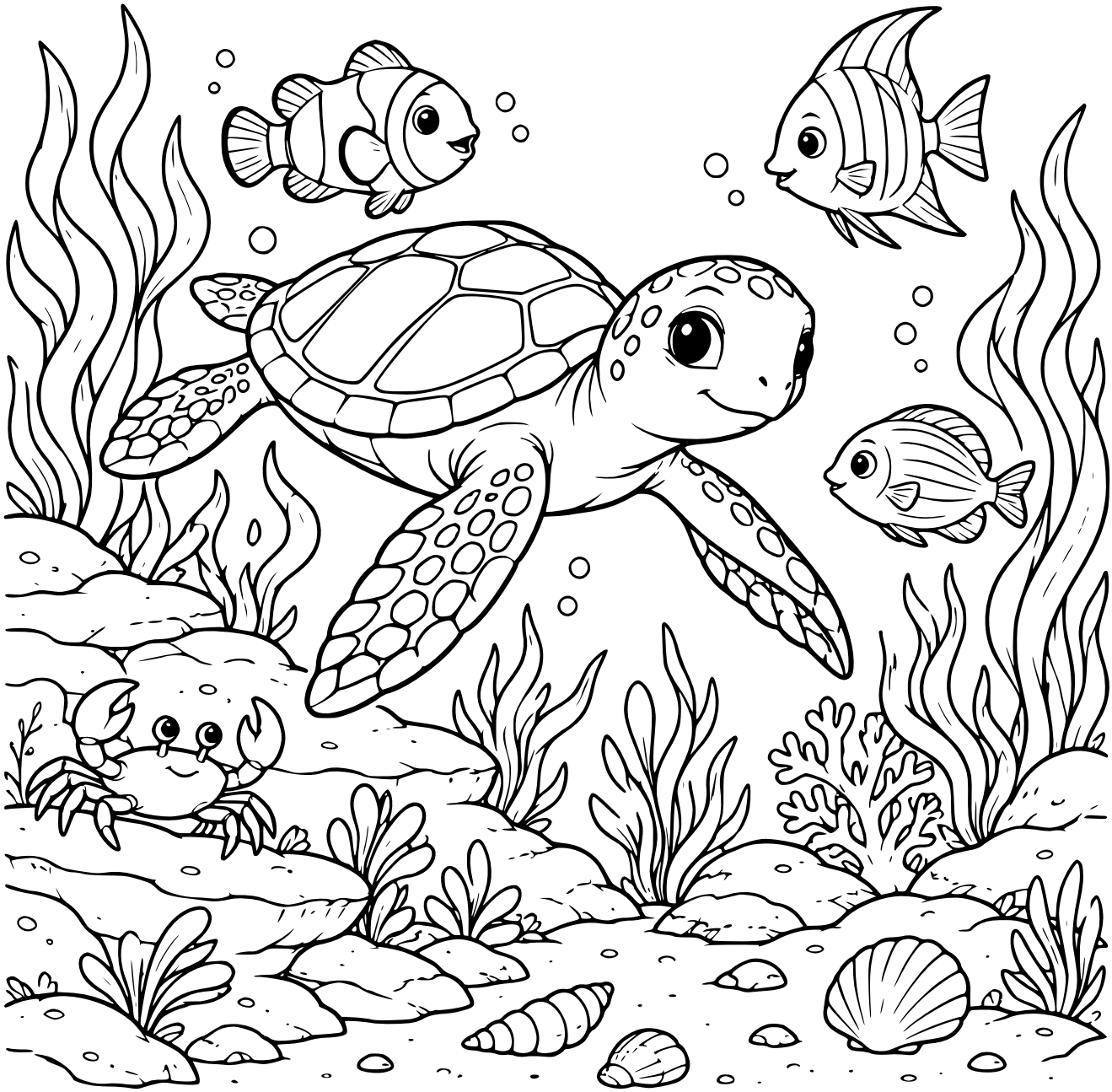
ColourAcorn

Under the Sea Explorer Workbook

Look for evidence. Discover patterns. Share what you learn.



Suggested ages 5–7 · Five short sessions with adult support

10 activities · Adult guide · 4 separate answer pages

A Guide for Grown-ups

Use five short sessions. Adjust the pace and reading support for the learner.

This workbook combines fixed pictured tasks with an individual observation of a real photograph, book illustration or aquarium display. No sea visit is needed. Read aloud and scribe the child’s own words when helpful. The story is an original read-aloud text, not a fully decodable phonics passage.

1. Learn and label

Pages 3–4

Match six useful words to their meanings, then label the external features of a sea turtle using a clear top-view diagram.

2. Count and calculate

Pages 5–6

Count the exact pictured survey, compare totals and solve four short addition and subtraction stories.

3. Find patterns and story clues

Pages 7–8

Continue repeating sea patterns, explain one repeating unit, then retrieve details from an original shore-side story.

4. Evidence and ocean care

Pages 9–10

Separate what a field sketch shows from what it cannot tell us. Choose considerate actions and give a reason.

5. Observe and report

Pages 11–12

Look closely at a real image chosen with an adult, record only visible details and make a labelled explorer report.

All counted animals are printed drawings, not a claim about a real reef survey. Diagrams are not species-identification keys.

At the coast or an aquarium, follow staff guidance, stay beside an adult and observe wildlife without touching or feeding it.

Keep the four answer-guide pages separate. Open drawing and observation tasks are checked against evidence, not one model picture.

Scientific statements checked against NOAA. Original artwork is illustrative; the labelled diagram teaches external features.

Ocean Word Detective

Precise words help you describe what you notice and what you wonder.

Read the six words with an adult. Write the correct word letter beside each meaning. Use every letter once.

A surface	☐	look closely and notice details
B seabed	☐	the top of the water
C flipper	☐	a hard covering on an animal
D shell	☐	say what you think might happen
E observe	☐	the bottom of the sea
F predict	☐	a broad, flat limb used for swimming

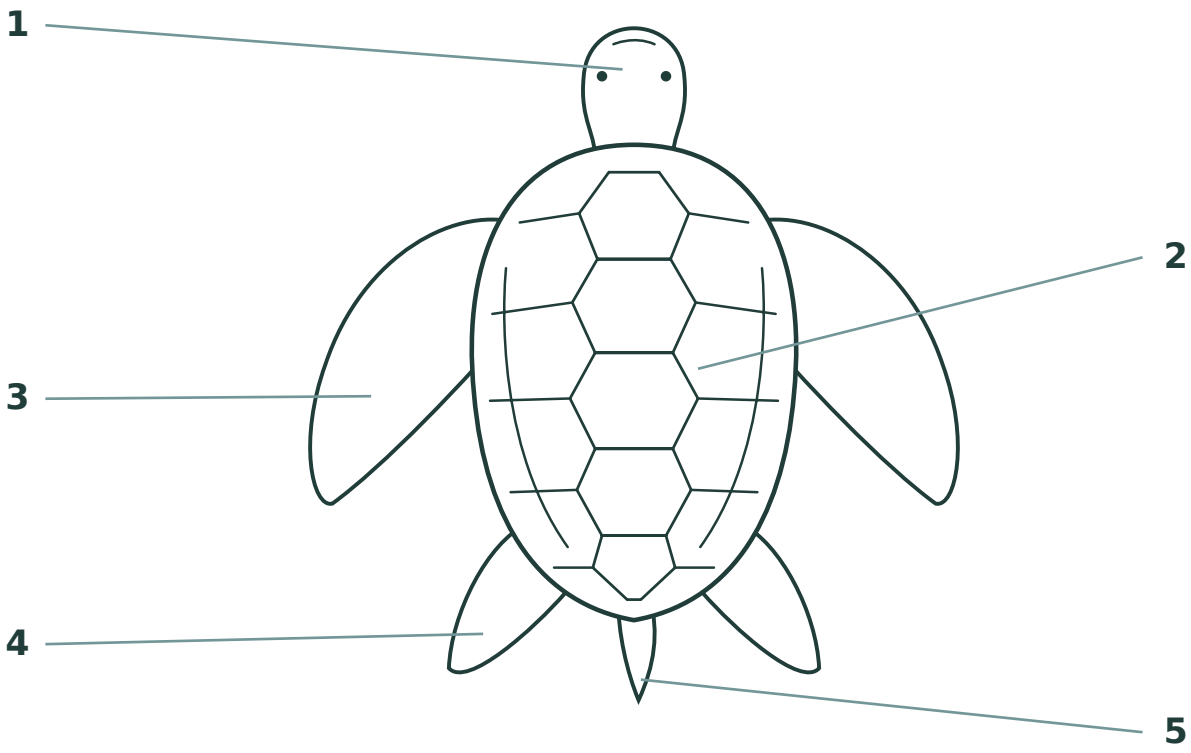
Tell someone the difference between observe and predict.

A shell is a hard covering, including the one shown on the turtle diagram on the next page.

Meet a Sea Turtle

One head, one shell, two front flippers, two rear flippers and a tail.

This top view shows the outside of a sea turtle. Use the word bank to name each numbered feature.



head · shell · front flipper · rear flipper · tail

1. _____ **2.** _____

3. _____ **4.** _____

5. _____

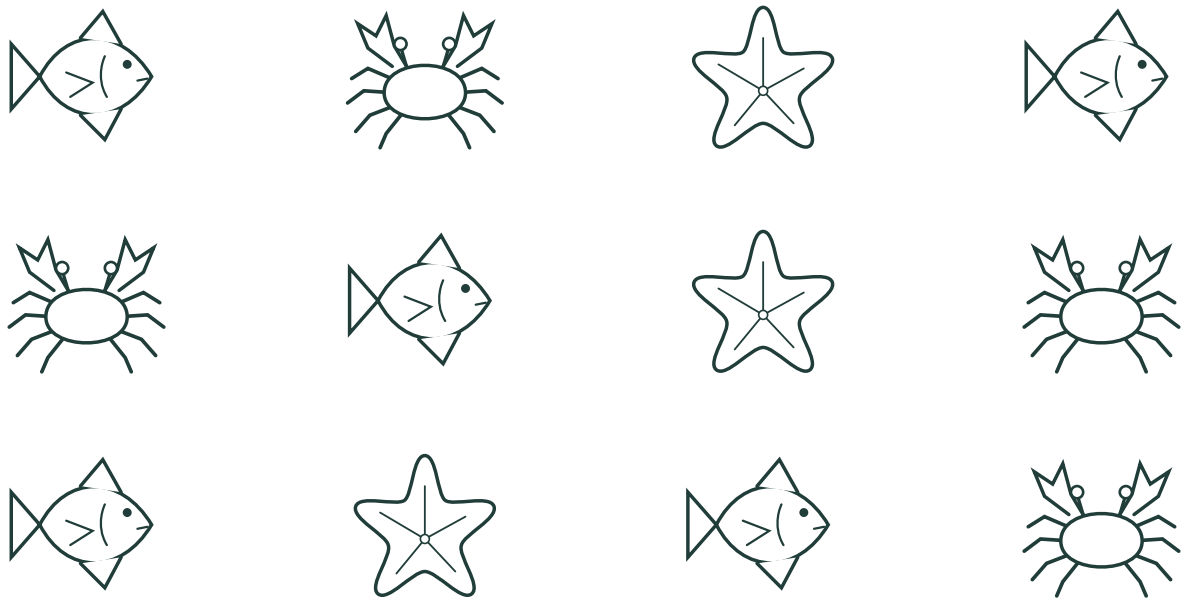
Sea turtles come to the surface to breathe air.

Original schematic diagram. The top view makes all four flippers visible; it is not a species-identification key.

A Pictured Reef Survey

Use one counting touch or pencil mark for each printed animal.

This is a made-up pictured survey, not a real field record. Count each animal inside the box once. Write the total for each kind.



Fish	Crabs	Sea stars
_____	_____	_____

How many animals altogether? _____

Which kind has the most animals? _____

How many more fish than sea stars? _____

These sea-star drawings have five arms. Real sea stars do not all have the same number of arms.

Ocean Number Stories

Decide whether each story needs adding or taking away.

Read each short story. Use the space to draw marks, then complete the number sentence and answer the question.



1. There are 5 fish. Then 3 more fish join them.

How many fish now?

5 + 3 = _____



2. There are 7 crabs. Then 2 crabs hide behind a rock.

How many crabs can still be seen?

7 - 2 = _____



3. One sketch shows 4 sea stars. Another shows 2.

How many sea stars in both sketches?

4 + 2 = _____



4. A picture shows 9 shells. A hand covers 4 shells.

How many shells are not covered?

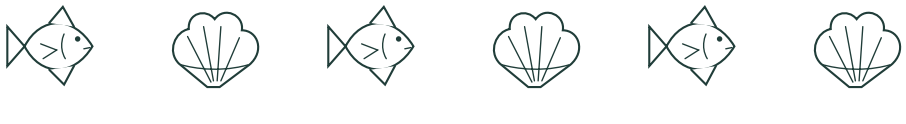
9 - 4 = _____

The animals and shells are in imagined groups or pictures. No collecting or handling is needed.

Sea Pattern Laboratory

Look for the smallest unit that explains the whole row.

A repeating pattern has a unit that repeats in the same order. Draw the missing pictures. Each row shows at least two complete units.

1. 

2. 

3. 

4. 

Choose a row. Name its smallest repeating unit.

Draw simple recognisable versions of the pictures; artistic detail is not part of the pattern answer.

A Message on the Shore

An original story about asking questions and caring for a coastal place.

Read together

Zara and Dad stopped on the dry path above the beach. Zara opened her blue notebook. She drew the waves and a gull standing on a rock.

A paper wrapper blew towards the sand. Dad caught it before it reached the water. “We can put our rubbish in the bin,” said Zara. Dad put the wrapper in a bag until they found a bin.

Zara wanted to know what lived beneath the waves. They could not see through the water. “Let’s look in our ocean book at home,” said Dad. Zara wrote a question in her notebook.

1. Who was with Zara?

2. What colour was Zara’s notebook?

3. Where did Dad keep the wrapper until they found a bin?

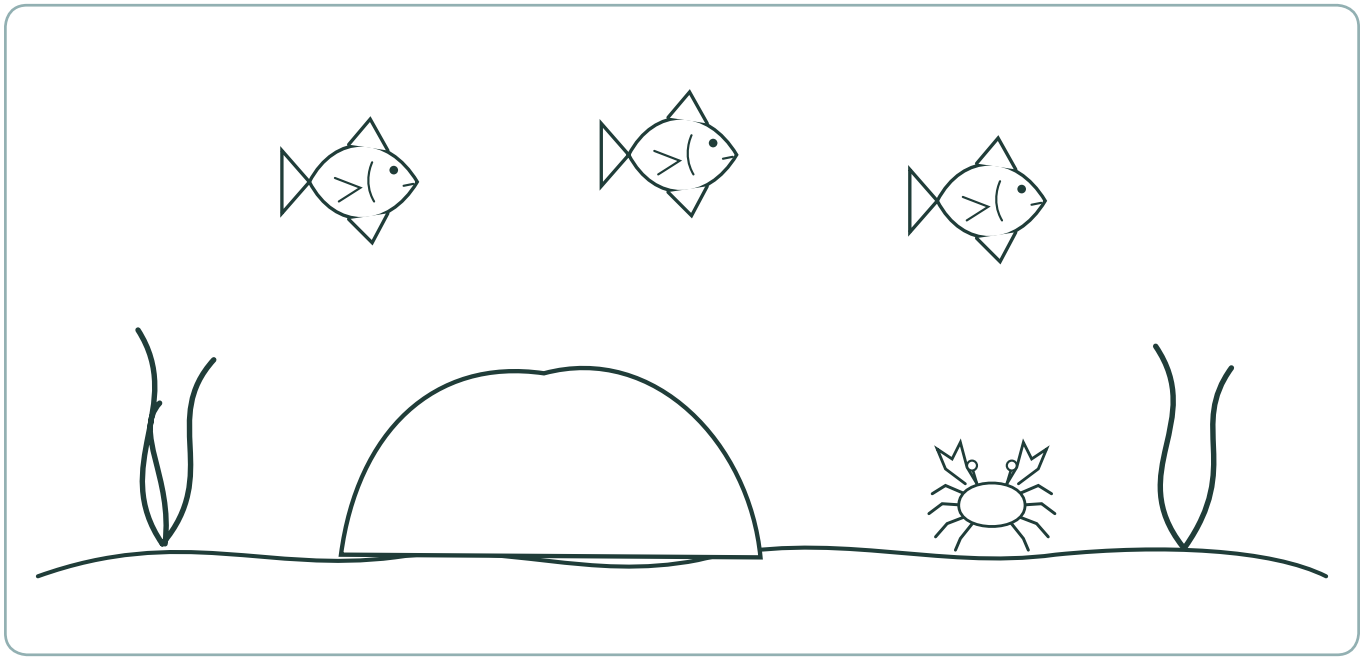
4. What did they plan to look in at home?

An adult may read aloud. Answer from this story; the story does not promise sightings on a real visit.

What Does the Sketch Show?

Careful observers separate visible details from untested ideas.

Look only at this field sketch. For each statement, circle “shown” if you can point to evidence in the drawing. Otherwise circle “cannot tell”.



1. Three fish are drawn above the rock.

shown / cannot tell

2. The fish are hungry.

shown / cannot tell

3. A crab is drawn on the seabed.

shown / cannot tell

4. The water feels cold.

shown / cannot tell

A still drawing cannot tell us how an animal feels, what it wants or the temperature of the water.

Ocean Care: Choose and Explain

Small choices can help people observe wildlife and keep places tidy.

Circle the more considerate action in each pair. Then choose one pair and explain why your choice helps.

1. After a snack

A. Leave my wrapper on the sand.

B. Keep my wrapper for a bin.

2. A turtle is nearby

A. Watch quietly from a distance.

B. Reach out to touch its shell.

3. An aquarium visit

A. Tap the glass to make fish move.

B. Follow the staff’s viewing guidance.

4. For my ocean notebook

A. Draw an animal where I see it.

B. Take a living animal home.

I chose pair ___ . My action helps because ...

Leave unknown litter untouched and tell an adult. Stay beside an adult at the coast or aquarium.

My Ocean Image Observation

A picture is evidence about what it shows, with limits to what we can learn from it.

With an adult, choose a real ocean photograph, a book illustration or an aquarium display. Record what you can see. Say which kind of source you used.

Source: _____

Animal or object I am looking at: _____

Draw a close view. Add two labels for visible features.

Two details I can point to in my source:

_____

_____

One thing this source cannot tell me:

_____

_____

No visit to the sea is needed. An adult can help select a clear image and write the child’s own words.

My Ocean Explorer Report

Share a labelled drawing, two accurate facts and a question to explore next.

Use what you have learned to make an explorer report. Draw a sea scene and label the water surface and seabed. Add one animal and name it.

My labelled sea scene

Two facts I can tell someone:

_____

_____

Fact bank: choose two or use another checked fact.

Sea turtles come to the surface to breathe air.

Sea stars are animals, but they are not fish.

Rubbish that reaches the sea can harm animals.

My next ocean question: _____

A made-up sea scene is a model, not a record of a real sighting. Explain the difference when you share it.