Fishy Fun

There are 6 fish.
Color 2 fish red, color 1 fish blue, and color 3 fish green.

Circle the fish that is different from the rest.

Count and circle the number of fish below.
The Tale of the Tails

The animals below have all lost their tails and they need your help. Draw a line connecting the animal on the left to their missing tail on the right.
Hey, Wait For Me!

One little turtle has lost his buddies and he needs your help finding his way to the beach. But you have to be careful...seagulls and crabs love to eat baby turtles. Draw a line connecting the little turtle to his turtle buddies, and remember to stay away from the seagull and the crab!
Label a Fish

Instructions: Fill in the boxes with the correct words below.

Words to use:

- Pectoral fin
- Dorsal fin
- Mouth
- Caudal fin
- Gill
- Eye
Shark Puzzle

Cut out and glue the puzzle pieces to the labeled pattern to learn more about the shark.

What provides the speed for the shark?
What fin helps balance the shark?
What fin helps the shark to steer?
What does the shark use to breathe?
What does the shark use to catch its food?
These fishes are all mixed up. Help them decide what type of camouflage they have. On the line below each fish, write down which type of camouflage each fish has from the descriptions below.

### Types of Camouflage

1. **Countershading** - These fishes are darker on their backs and lighter on their bellies.
2. **Disruptive Coloration** - These fishes have many different colors and markings.
3. **Cryptic Coloration** - These fishes blend easily into their habitats. They can resemble seaweed or rocks.
4. **Black Eye-Band** - These fishes have a dark stripe that covers their eyes.

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Coloration and Camouflage

Camouflage and coloration help animals survive in their environment. Help each fish below by coloring them with the proper camouflage or coloration.

- False Eye-Spot
- Disruptive Coloration
- Countershading
- Warning Coloration
Use the clues below to fill in the crossword puzzle boxes. If you need a little help, you can find the answers to the clues in the box to the right.

Across
3. Turtles lay their eggs on a sandy _______.
6. The _____ line on a shark helps detect vibrations in the water.
8. Stripes, spots, colors, and patterns on a fish are types of _______.
9. Great whites, sand tigers, and sandbars are all types of _______.
12. Sharks have many sharp _______ in their mouth.

Down
1. Jellyfish use _________ to gather food.
2. A ________ is made up of 96% water.
4. A porcupine pufferfish has prickly ________ to help protect them from sharks.
5. Sea turtles use ________ to swim.
7. The top part of a turtle’s shell is called a _________.
10. The place where an animal lives is called a __________.
11. Lionfish fins have __________ in them.
But that’s really what I saw...

**Directions**
Many years ago, sailors at sea told tales of seeing half-woman, half-fish creatures called mermaids. Tales of mermaids were passed down from voyage to voyage and from generation to generation. Today, we believe the sailors actually were looking at manatees. It’s hard to believe a beautiful mermaid could be confused with a portly manatee, but remember, long voyages at sea can lead to an active imagination.

Today, you are going to use your imagination. Sit quietly and relax for one minute. Imagine you are on a boat sailing across the ocean. It is a calm, sunny day on the water. Suddenly, your boat rocks back and forth. You jump out of your seat and spot the most amazing creature. It is unlike anything you have ever seen before. Take this sheet of paper and draw the creature before it heads back under the water. Make sure to write a paragraph describing the creature, and include how large it is, what color it is, and what behaviors it is doing. Be prepared to share the tale of your adventure with your class. You’ll be sure to start a legend of your own.
Turtle Math

This turtle’s name comes from the green layer of fat in its body.

To find the answer, calculate the solution to the mathematical problems in the table below. Then, use the numeric solutions to determine the correct letter from the Numeric/Letter Key below, and fill it in the letter row. The first one has been done for you. The letters can be used more than once.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 + 3</td>
<td>3</td>
</tr>
<tr>
<td>4 - 2</td>
<td></td>
</tr>
<tr>
<td>5 + 1</td>
<td></td>
</tr>
<tr>
<td>4 - 3</td>
<td></td>
</tr>
<tr>
<td>10 + 4</td>
<td></td>
</tr>
<tr>
<td>4 + 7</td>
<td></td>
</tr>
<tr>
<td>5 - 1</td>
<td></td>
</tr>
<tr>
<td>9 + 5</td>
<td></td>
</tr>
<tr>
<td>1 + 1</td>
<td></td>
</tr>
</tbody>
</table>

Numeric/Letter Key

2=E  4=L  6=R
3=G  5=N  8=T
9=U

This turtle can grow to 5 feet in shell length and has an average weight of about 300 pounds!
Hunters

Read the description of the hunting techniques below, and then determine what animal best fits that description.

1. I hunt by ambushing my prey. I wait silently for my prey to come down to the water’s edge for a drink. Once the prey is close enough, I lunge towards the prey, grab it with my powerful jaws, and drag it underwater. Once submerged, I will do the “death roll”. I will turn over and over with the prey in my mouth, before stopping to eat my meal.

What animal am I? ________________________________________________________________

2. I scour the ocean bottom, sifting through sand and debris, looking for my favorite meals. I love to eat small, shelled animals such as crabs, shrimp, and lobster. Even though I do not have teeth, I do have strong jaws to crack open the shells of my prey.

What animal am I? ________________________________________________________________

3. Usually, I am quite shy. But if I sense an animal thrashing around in the water, or if I smell a little bit of blood, then watch out! Massive schools of my kind will start to attack! I have razor-sharp teeth, swallow my food whole, and can strip the flesh and bones of my prey in just a few minutes. When you visit me at Shark Reef, don’t get too close!

What animal am I? ________________________________________________________________

4. I hunt by sneak attack. I swim slowly through the water, silently approach my prey, and then attack without warning. I have thousands of teeth in my mouth, and I lose and replace them all of the time. My favorite foods are fish, sea turtles, and seals.

What animal am I? ________________________________________________________________

CROCODILE

STINGRAY

SHARK

PIRANHA
Shark Sorting Directions:

Have each student cut out the shark cards, and then use the Shark Identification Key to sort their cards. Students can take any shark card and begin with Step 1. As they proceed, they will observe that the process of elimination leads them to a single identification for each shark.

SHARK IDENTIFICATION KEY

**STEP 1**
If the shark has one large fin and one small fin on top...go to Step 2.

If the shark has two equal size fins on top...go to Step 4.

**STEP 2**
If the shark has a rounded head with its eyes way out on the sides, it is a bonnethead shark.

If the shark has a narrow shaped head...go to Step 3.

**STEP 3**
If the shark has black tips on its fins, it is a blacktip reef shark.

If the shark has solid gray fins, it is a sandbar shark.

**STEP 4**
If the shark has a long, slender tail that is almost as long as the body...go to Step 5.

If the shark has a short but powerful tail... go to Step 6.

**STEP 5**
If the shark has one large black spot near the head, it is an epaulette shark.

If the shark does not have a single black spot, but many tiny brown spots, it is a zebra shark.

**STEP 6**
If the shark has large black spots all over the body, it is a leopard shark.

If the shark has a light gray body with some small spots, it is a sand tiger shark.
Build a Horseshoe Crab Puppet

**OBJECTIVE**

Students will learn the location and function of the body parts of a horseshoe crab by constructing a horseshoe crab puppet.

**MATERIALS**

Horseshoe crab patterns, scissors, glue, crayons, brass fasteners.

**PROCEDURE**

1. Photocopy and enlarge the patterns on the next page for each student in your class (a good size is approximately one page for each pattern).
2. Have students cut out patterns 1 and 2.
3. Glue the back of pattern 1 onto the back of pattern 2. Only glue around the very outside edges, as seen in the pictures to the right. This will allow you to slide your arm into the puppet.
4. Have students cut out pattern 3.
5. Glue the legs and gills onto the bottom shell (pattern 2) where indicated.
6. Use the brass fastener to connect the tail to the main body (on pattern 1).
7. Students can color their puppet any way they like.
8. Have students place their arm in the puppet and place their first two fingers through the two top holes to make up the final two legs of the horseshoe crab.
9. Point out the different parts of the horseshoe crab.

![Horseshoe Crab Diagram](image)
PATTERN 1
TOP OF PUPPET

PATTERN 2
BOTTOM OF PUPPET

PATTERN 3
TAIL, LEGS, GILLS

LEGs
Cut around the outside of
the legs, and then cut on
the dotted lines.

GILLS
Cut around the outside of
the gills, and then fold on
the dotted lines.

Place the brass fastener
through the black dot to
attach the tail to the body.
Shark Reef
Observation Book

**OBJECTIVE**

*The student will draw pictures during a visit to Shark Reef to compare and contrast the various animals.

*The student will investigate how ocean animals are adapted to certain parts of their environment.

**MATERIALS**

*Copies of the Shark Reef Observation Book cover page for all students.

*Copies of the observation pages for students.

*Pencils and colored pencils or crayons.

**PROCEDURE**

1. Make copies of the cover page (1 per student).
2. Make copies of the observation pages for students - as many per student as you would like - but probably at least 5 observation pages. These pages will be used to draw pictures of some of the animals the students will observe during their Shark Reef visit.
3. Have students attach all of the pages with a staple to make a book.
4. On the day of the visit, have students bring their books and some crayons or colored pencils.
5. During their visit, students can stop and draw colorful pictures of some of their favorite fish and animals they see. Also have them draw adaptations that the particular animal has.

**Note:** You can also have students complete the book after their visit as a post-visit activity.

**FOLLOW-UP**

*For older students, discuss the various adaptations they observed. Explain what these adaptations would be used for (to help animals find and eat food, to avoid predators, to move, and to defend themselves).

*For younger students, you can omit the adaptation section, and just use the pictures to compare and contrast the various animals they observed.
Shark Reef Observation Book

Student’s Name_______________
Find an animal you find interesting during your visit to Shark Reef. Draw a picture of the animal below. If you notice any survival adaptations, draw them in the additional two boxes below. Write down what you think each adaptation helps the animal to do. For example, a jellyfish has stinging tentacles which are used to catch prey. Have fun!

The animal I observed was a __________________________________________________

<table>
<thead>
<tr>
<th>Adapted body part:</th>
<th>What it is adapted for:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>
Name Tag

Have each student color the fish below.

Write the name of the student on the fish, and cut the fish out.

Punch a small hole on the top.

Now you can put a string through it and wear it like a necklace! We are excited to know who you are!