Animals
2 x 2
3rd Edition
Notebook
Date:

Fq: What are the parts of a goldfish?

Data: Scientific illustration

Teacher Note: Encourage thinking: eyes/seeing, mouth/eating, fins/tail/moving.
I observed a goldfish uses fins to help it move. (I know this because...)

Orally

In addition, they swim to the top to get their food.
Date:

FQ: What do goldfish need to live?

Data:

Encourage observation over days to observe effects of adding food, clean water, and plants.
I noticed the goldfish hides in the plants. (I think this because it makes him feel safe.)—orally

or

I noticed the goldfish swims to the top to get food. (I know this because...) or

I wonder
Date:
FQ: What do goldfish do?

Data: Draw a rectangle

X where they saw fish swim.

Encourage vocabulary:
above
below
in front of
next to
I observed that the goldfish swims in and out of the tunnel. (I wonder if he does that to hide.) orally

In 2 minutes, the goldfish went in the tunnel 5 times.
**Date:**

**Q:** How are guppies and goldfish alike and different?

**Data:** Box + 1 $\rightarrow$ whole group lesson

* First do different, next day same!

<table>
<thead>
<tr>
<th></th>
<th>in water</th>
<th>eyes</th>
<th>mouth</th>
</tr>
</thead>
<tbody>
<tr>
<td>guppies</td>
<td>eat elodea</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>eat fish flakes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>fins</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>swim</td>
<td></td>
<td></td>
</tr>
<tr>
<td>goldfish</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>orange</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>big</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>V tail</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reading: Fish Same and Different
I observed they are the same because guppies and goldfish both eat fish flakes.

or

I observed they are different because the goldfish is orange but the guppy is gray.

I wonder...

or

Guppies and goldfish are alike because they both eat fish flakes.

They are different because guppies have a circle tail but goldfish have a triangle tail.
Date:

FQ: What birds visit our yard?

Data:
- make binoculars - tp rolls and string
- Bulleted list - whole group
  - blue birds
  - gray with red beak
  - fly from branches
  - wings flap
  - different sounds
  - eyes
  - beaks are pointed
  - eat berries, worms

Teacher Notes:
- Set up bird feeders
- pictures of birds common to area

Reading: Birds Outdoors

Video: A House for Hermit Crab?
I observed a small gray bird. It kept flying from branch to branch. (I wonder if ......) or In addition, the birds make many different sounds.
Date:

Fe: what are the parts of a water snail?

Data:

shell - protect

foot

tentacles - feel

more
I observed that a water snail has two tentacles. (I think they help him move and feed.)
Date:

FQ: How can shells be grouped?

Data:

Pick one way and illustrate:

Size/color/shape/texture/pattern

<table>
<thead>
<tr>
<th>oooo</th>
<th>oooo</th>
</tr>
</thead>
<tbody>
<tr>
<td>gray</td>
<td>brown</td>
</tr>
<tr>
<td>oooo</td>
<td>oooo</td>
</tr>
<tr>
<td>white</td>
<td>color</td>
</tr>
</tbody>
</table>

Video: Seashore Surprises.
I grouped my shells by color. 6 were gray, 4 were brown, and 5 were white. There were the most gray shells. I wonder who lives in my shells.
FQ: What do land snails do?

Data: Bulleted list w/teacher:
- Hang upside down faster when wet
- Feel with 4 tentacles
- Eat leaves carrots attract to light

Scientific illustration of land snail doing something:

Reading: Water and Land Snails
I observed the land snail going over the fence. His food goes back and forth when he moves. In addition, he moved faster when he was sprayed with water.
Date:

**FQ:** What are the parts of a Redworm?

**Data:**

- head
- mouth
- clitellum
- tail

**Teacher info:**
- Sense with entire body (no eyes, nose)
- Live underground - come up when rains (watch out for drowning) to breathe (5 hearts, no lungs, breathe thru skin)
I observed that a redworm has a head and a tail. In addition, it has segments that move and twist the body to help it move.
Date:

FQ: What do redworms need to live?

Data: After observing

- Food
  - Draw petals, weeds, carrots, seeds

- Water
  - Draw apple, spray bottle, lettuce

- Space/Air
  - Draw jar with holes in lid

- Shelter
  - Newspaper, dried leaves, weeds

wk 1

wk 2

wk 3
Redworms need air and space to live. In addition, they need food, water, and a home. I observed my redworm curling up in the newspaper to feel cozy. It reminds me of curling up in my bed.
Date: [missing]

**FQ:** How are **redworms** and **night crawlers** alike and different?

**Data:** whole class - after observing worms

![Diagram]

- Segments
  - head + tail end
- Need water + food
  - wiggle forward

<table>
<thead>
<tr>
<th>redworms</th>
<th>night crawlers</th>
</tr>
</thead>
<tbody>
<tr>
<td>small</td>
<td>big</td>
</tr>
<tr>
<td>red-brown</td>
<td>brown</td>
</tr>
<tr>
<td>smooth</td>
<td>rough on belly</td>
</tr>
</tbody>
</table>

Reading: Worms in Soil
The redworms and night crawlers are the same because they both have segments. They are different because the redworms are smooth and the night crawlers are rough on their bellies. I wonder...
Date:

**Q.** What are isopods?

**Data:**
- 14 legs
- 2 antennae
- Can't climb
- Some roll in ball
- Brownish
- Grayish
- Carapace (outside covering)

Illustration

- Carapace: protect
- Antennae: sensing
- Legs: move
I observed the isopods are little animals (bugs) that have lots of legs. I counted 7 on each side. I think he uses them to move really fast. In addition,...
**Q:** How are pill bugs and sowbugs alike and different?

**Data:**

- Hard carapace
- 14 legs
- Need moisture
- Eat potato or carrot

<table>
<thead>
<tr>
<th>Pill Bugs</th>
<th>Sowbugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rounder</td>
<td>Flatter</td>
</tr>
<tr>
<td>Roll up</td>
<td>Turn over</td>
</tr>
<tr>
<td>Darker color</td>
<td>Lighter color</td>
</tr>
<tr>
<td>Short antennae</td>
<td>Long antennae</td>
</tr>
</tbody>
</table>

**Reading:** Isopods
The pill bugs and sowbugs are alike because they both have a hard carapace (shell). They are different because the pillbug rolls up to protect itself and the sowbug flattens itself. It reminds me of...
Date:

Q: How do isopods move?

Data: Observing + collecting outside
Isopod races

Draw a line to show how isopod moved

Reading: Animals All Around Us
I observed the isopods move in a straight line. They use all their legs to go fast. I wonder why they stop sometimes in the middle of the race.
Date:

Q: What do animals need to live?

Data: Create class terrarium

Living | Non-living

Outdoor search

Reading: Living and Non-living
Our class created a terrarium for our animals to live together. They needed ...