

Integrated Science/Math Lesson

Grade - Kindergarten

Science Unit – Animals Two by Two: Investigation2 Part 4 (Shells) modification

Standards:

NGSS

1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

CCSS - Math:

K.MD.A.1 (Measurement and Data)

Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

K.MD.B.3 (Measurement and Data)

Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

WA-KIDS Objectives:

Objective 9 a,b

Objective 10 a,b

Objective 11 c,d,e

Objective 13

Objective 20 a,b

Objective 22

Introduction:

Introduce the video:

- Tell students they will be watching a video that shows different snails. Tell them to pay close attention to the different snail shells, and that after they watch the video they will be discussing what they noticed about the different snail shells.
- Show the You Tube video: The Secret Life of Snails
<https://www.youtube.com/watch?v=MMNgPBdwjmU>

After students watch the video:

Engage in Accountable Talk Conversation:

- **Prompt:** “What did you notice about the different snails?”
- Facilitate as students engage in accountable talk conversations to share their responses using evidence from the video.
- Consider providing 1-2 accountable talk sentence stems to encourage students to listen to and respond to peers.
- Model note taking of student responses from the Accountable Talk discussion using a graphic organizer note-taking chart to record important information that will help the class describe and sort the shells.

Hands-on Science Experience: (using Kindergarten: Animals Two by Two Investigation 2 Part 4: Shells--- Steps 1-5 (stop after step 5: *Discuss Shell Organization to add in math extension*) (pg. 23 and pg.24) – 30 min

Interdisciplinary Extension:

Math Extension (K.MD.A.1, K.MD.B.3)

After the shells organization discussion:

Teachers who have the Animals Two by Two unit can use the bag of shells to enrich/extend a math-science center during or revisiting Topic 13-Sorting, Classifying, counting, and categorizing data.

- Teacher shows group how she organized her shells into groups using a blank T-Chart.
- Teacher poses questions (to elicit specific vocabulary relating to measurable attributes such as longer or shorter, bigger or smaller, lighter or heavier):
 - Can you describe the shells in each group?
 - What do you notice about the shells in this group (point to a group of small shells)?
 - Have the students help label groups using a measurable attribute and add the name of the group to the T-Chart
 - Regroup shells on a new T-chart and have the students try to guess how you grouped your shells, and together come up with heading for the T-Chart
- Create a list on chart paper of the measurable attributes you are using to describe the shells
- Have children chose a measurable attribute from the list to re-sort their shells with a partner
- Once students have re-sorted their shells, have them share their sorting rule and count how many shells are in each group
- Together, identify which group has more, less, greater, fewer, etc

Hands-on Science Experience: (using Kindergarten: Animals Two by Two Investigation 2 Part 4: Shells: Wrapping Up Part 4)

- Review Word Bank Entries (on chart paper)
- Show the T-Chart to the class (under the document camera)
- Read the headings of the T-Chart so students know the sorting rule

<u>Snail Shells</u>	<u>Other Shells</u>

Assessment:

Add to Science Notebook

Teacher poses assignment to class:

- Pass out T-Chart to each student
- Have students glue T-Chart into their science notebooks
- Instruct students to draw at least 3 shells to go in each group on the T-Chart

Snail Shells

Other Shells