

Zoology

Invertebrates

Activity – To Borrow a Bug

Materials:

A tray set up containing:
→ (1) Butterfly net

Presentation:

1. The teacher should invite the children to join her for a “circle time.”
2. The teacher should place the Bug Catching Tray in front of her.
3. During circle time, say to the children, “Today, we are going to go out into our garden and **borrow some bugs!**”
4. The teacher should then say, “**I am going to show you how to catch a bug gently and then return it back to where you first found it!**”
5. The teacher should then say to the children, “We have been studying about the **Animal Kingdom**. The **Animal Kingdom** is made up of **Vertebrates** and **Invertebrates**. Most of the animals on Earth don’t have a backbone. If you don’t have a backbone are you a **Vertebrate** or are you an **Invertebrate**?”
6. After the children have discussed the answer to the question the teacher should say, “**Yes, animals that don’t have a backbone are called Invertebrates!**”
7. The teacher should then ask the children, “Do insects (bugs) have backbones?”
8. After the children have discussed the answer to the question the teacher should say, “**Insects don’t have backbones so they are Invertebrates!**”

9. The teacher should pick up the butterfly net and say to the children, “This is a butterfly net. It can be used to catch butterflies and other bugs.”
10. The teacher should point to the netting and say, “The net is made of soft material so that the bugs we catch will not be hurt. **It is important not to cause pain or injury to any living thing.**”
11. The teacher should point to the handle and say, “This is the handle which you hold in your hand like this (demonstrate how to hold and swing the net). **It is important not to swing fast so that we do not scare the bugs we are catching.**”
12. The teacher should invite the children to follow her out into the garden.
13. After the children are in the garden, find a bug and show the children how to **gently catch a bug**. The teacher should show the children how to close the net opening with her hand.
14. After you have **caught a bug** say to the children, “**We need to remember where we caught this bug so we can return it back close to where it lives.**”
15. The teacher should invite the children to return to the classroom and to the circle.
16. The teacher should hold up the net and pause to study the bug.
17. The teacher should say, “This is a wonderful bug! It is a wonderful part of creation. I am glad that it lives in our garden!”
18. The teacher should invite the children to take turns coming over to study the bug.
19. The teacher should say, “Now, it is time to take this bug back to where it lives in our garden.”
20. Invite the children to go with you outside to the garden.
21. The teacher should go back to where the **bug was “borrowed”** and released.
22. The teacher should say to the children, “Today, we have **borrowed a bug** so that we could look at it up close.

Variations and Extensions:

1. Invite the children to make a bug catcher using recycled materials.
2. Have a field guide available to look up the bug and find out more about it.
3. Tell a story or write a story about the bug

Points of Interest:

1. The realization that bugs are invertebrates
2. The realization that another name for a bug is insect
3. The realization that bugs live outdoors in our gardens

Control of Error:

1. The teacher needs to have a deep sense of caring for all living things

Aims:

Introduction on how to catch and observe a bug in a way that respects life.

Approximate Age:

2 ½ and up

Language:

Bug, insect, butterfly net, etc.

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Activity – Building a Bug Home

Materials:

A table set up containing:

- Empty plastic/glass jars (enough so each teacher and child will have one)
- Container holding Cotton Swaps
- (1) Jar containing small amount of water mixed with honey
- (1) Container holding grass clippings
- (1) Container holding bark chips
- (1) Container holding small twigs
- (1) Container holding small leaves
- Pre-cut pieces of tulle netting (bridal veil fabric or other loosely woven fabric to allow air to flow in and out of the jar without letting the bug to crawl out)
- Rubber bands

Presentation:

1. During circle time, say to the children, “Today, we are going to build a home for bugs!
2. The teacher should then say, “Bugs are living things. Living things need water, air and food to grow. We are going to build a home for bugs so that they will be **safe while we are looking at them (studying).**”
3. Invite the child to go over to the table that has been set up with items to build the **bug homes**.
4. The teacher picks up one of the empty containers and says, “This container will be my **bug home**.”
5. The teacher then says, “I want to make the inside of my **bug home** like the garden so I will put some garden materials into my jar (put a little of everything you have collected).”

6. Next, the teacher picks up one of the cotton swabs and says, “Bugs are living things. All living things need **water and food.**”
7. The teacher now points to the container that has the liquid in it and says, “This jar has **water and food** in it. The water in this jar has been mixed with honey.”
8. The teacher dips one end of the cotton swab into the honey water and places it wet swab side up in the bug home.
9. Next, the teacher says, “Now the top for my **bug home** has little tiny holes in it so that the **air that living things need** will be able to go in and out of my bug home.”
10. The teacher then places the pre-cut circle of netting on top of the **bug home** and takes a rubber band and secures it around the jar.
11. The teacher says, “**Now my bug home is ready. I am ready to go and borrow a bug!**”

Variations and Extensions:

1. Invite the children to make different types of **bug homes** using recycled materials.

Points of Interest:

1. The realization that bugs are living things that need water, air and food to maintain life

Control of Error:

1. The teacher needs to have a deep sense of caring for all living things

Aims:

Introduction on how to observe a bug in a way that respects life.

Approximate Age:

2 ½ and up

Language:

Bug, insect, etc.