Biodiversity – Invertebrate (Critters) Tally Sheet

We are going to explore the *biodiversity* of invertebrates--critters like bugs, worms, and snails--living in a specific area!

 Field Based Investigations	Use this tool if you are interested in asking investigation questions like: 1. **How do the kinds and numbers of invertebrates change if I check in an area that is covered with leaf litter and not covered with leaf litter?** 2. **How do the kinds and numbers of invertebrates change when it's rainy vs. when it's sunny?** 3. **How many of the same kinds of invertebrates are there near my house vs. near my school?**	You can use this tool either on its own to explore investigation questions like these, or as part of exploring your "Should We" question. Get your family outside to investigate your neighborhood!

Why is biodiversity important to socio-ecological systems?

Biodiversity*, or the variety of plants and animals in an ecosystem*, is important in complex systems because all parts of the system are connected in some way. Making decisions that can affect the biodiversity in systems that we are part of is important for humans to think about whenever we make changes to our ecosystems.

Connect to your "Should We question": Why does biodiversity matter to my neighborhood?

"Should We" questions like "Should we plant a garden?" or "Should we let our cat roam free outdoors?" or "Should we rake the leaves or keep them on the ground?" all have to do with biodiversity in some way. For example, if you wonder if you should rake the leaves, you might want to know who lives in, around, and underneath leaf litter in order to answer that question. In this way, you could use this critter count tool to investigate the *biodiversity* in areas with leaf cover and without leaf cover.

The investigation question we are asking is: _____

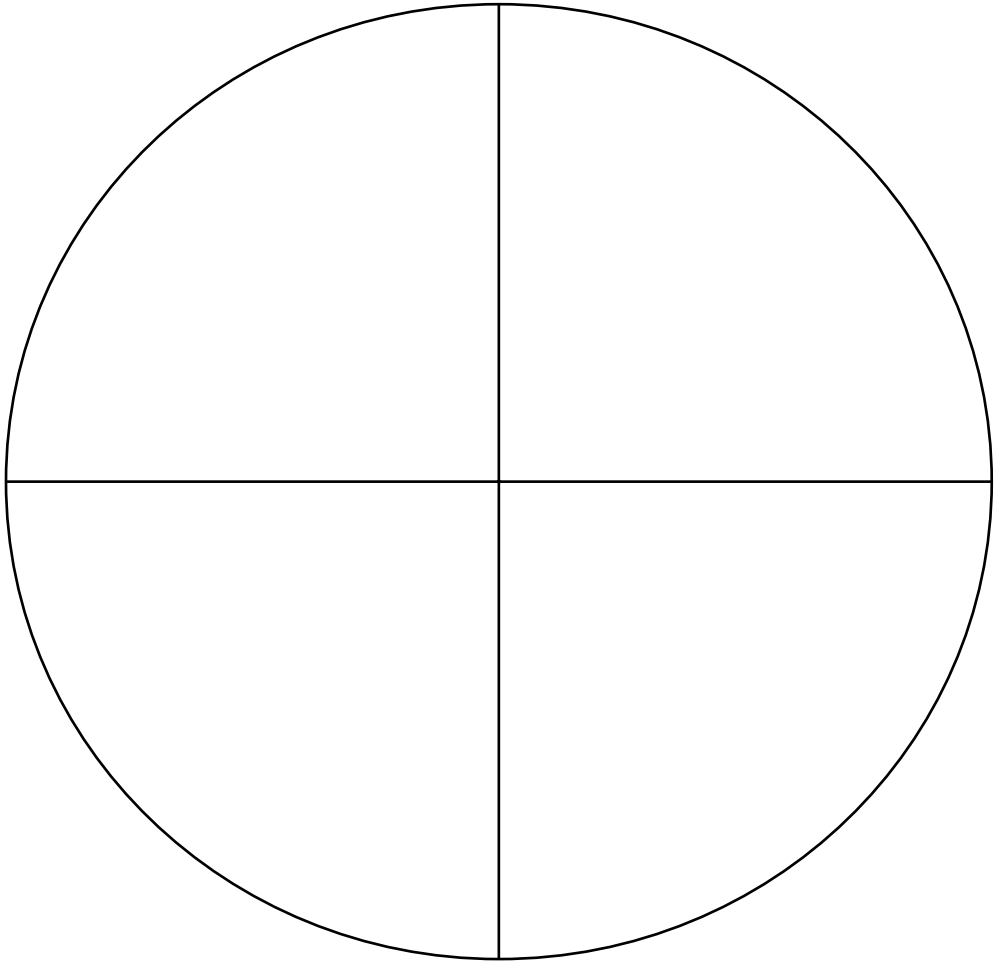
The should-we question we are exploring is: _____

Materials needed:	**Directions:**
❑ hula hoop, string (at least 2 feet long), or some other way to mark a spot to observe ❑ pencil ❑ blank paper or the next two pages	**Part 1:** 1. Place your hula hoop down in Location 1. 2. If there is leaf litter on your spot, you can *gently* move it aside. 3. In the circle draw what you see in your hula hoop, include plants, animals, rocks, etc. **Part 2:** 4. In the table, write or draw the invertebrates – critters – that you find and tally how many of them you find. 5. Gently place your leaf litter back where it was. **Part 3:** 6. Repeat steps 1-5. Depending on the question you're asking, you might repeat your observation in **another place** or **in the same place at another time**. ○ All scientists repeat their observations so that they can say whether what they're seeing is unique to one place or time.

Part 1

Date_____ Weather_____

Draw what you see in your hula hoop!



What questions do you have about what you found?

_____

_____

_____

_____

_____

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_____

_____

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Critter Count

Part 2 ❑ Location 1 or ❑ Time 1: _____		**Part 3** ❑ Location 2 or ❑ Time 2: _____	
What did I find? *(draw or write)*	How many? (tally marks)	What did I find? *(draw or write)*	How many? (tally marks)

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