It's for the Birds

BEFORE 2: Birds & Bugs from PLT

Before your visit to explore the concepts of camouflage as an adaptation for survival and to practice data analysis.

Estimate time: 30 minutes

VA standards addressed: Math (2023) 2.PS.1, 3.PS.1, 4.PS.1; Science (2018) 2.7, 3.1, 3.4, 3.5, 4.2, 4.3

Materials:

Inst

- ~60 small, bio-degradable objects in at least three colors (tri-colored noodles, beans, cereal, etc.) which will be the "bugs"
- large chart paper or white board

FAMILY

ACTIVITY

- crayons or markers
- optional: clothespins or tweezers to pick up bugs

Nature is a great teacher, and getting kids outside to learn and play is good for their brains and their bodies. Try this outdoor activity from Project Learning Tree[®]—it's safe, fun, and educational!

BIRDS AND BUGS

Discover the value of camouflage by pretending to be birds in search of worms.

Many animals are "color coordinated" with their surroundings. Any coloration, body shape, or behavior that helps an animal hide is called carnouflage. Take children outside to explore this concept.

Collect equal amounts of small, biodegradable objects in at least three colors that can be used to represent "bugs" in an outdoor setting. Consider using tri-colored noodles, beans, or shreds of paper.

Once outside:

- Spread or hide your colored objects (bugs) in a defined area.
- Have children "fly" around as birds and try to find the bugs.
- Make a chart or graph to visually record children's findings.

If your first trial was on grass, try the same exercise again on asphalt, or within a forested area. If you are working with multiple children, set up a relay race to find the scattered bugs, in which each child takes turns to go find a bug. The winning team is the first one to get all their members to find one bug. Children will most likely find the least carnouflaged objects first.

After completing the activity, ask:

- What color was easiest to find? How does this help the birds to survive?
- What color was hardest to find? How does this help the bugs survive?

FOREST FACT

Even a box turtle can camouflage. A box turtle's dappled shell mimics the spots of sunlight on the forest floor.



CAMOUFLAGE WORD SEARCH

Find the camouflaged animals listed below.

C G Q N H I R A C C O O N X J H U M M I N G B I R D C D H K T U V B O M U T X H F D B P H A G O W L B O X T U R T L E H D S O U L P P F L Y D P W F U														
С	G	Q	Ν	Н	Т	R	Α	С	С	0	0	Ν	Х	J
Н	U	м	М	Т	Ν	G	В	Т	R	D	С	D	Н	К
т	U	٧	В	0	М	U	Т	х	Ή	F	D	В	Ρ	Н
Α	G	0	W	L	В	0	Х	т	U	R	Т	L	Е	Н
п	S	0			P	P	E	1	v	n	P	w	F	

make learning FUN!

ROJECT

Encourage your child's school to incorporate outdoor learning by connecting with your local PLT program.

Visit plt.org/yourstate

It's for the Birds

Suggestions to graph results of bugs collected:

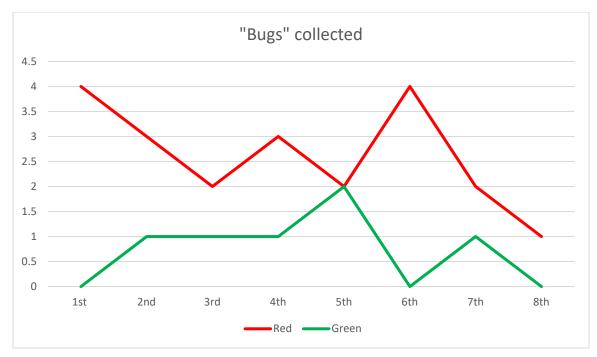
Red	<u>Green</u>		<u>Brown</u>	<u>Black</u>	
Have student teams record t any similarities or difference create pictographs or bar gra they collected. Help student	s. After, students can aphs to represent the data	Red Green Brown Black		ollected ¥¥¥¥	

Alternative chart for 3rd-4th grade, where bugs are recorded in order based on the student's position in line, example:

1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th
4 red	3 red	2 red	3 red	2 red	4 red	2 red	1 red
	1 green	1 green	1 green	2 green	0 green	1 green	0 green

Have students total and record the number of colored bugs in each column. Is there a pattern to the order in which the bugs were found? What might the pattern tell us?

Prompt students to brainstorm how to graphically display this data for analysis. Fourth grade prioritizes line graphs (example provided below).





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