

Guess Who: Animal Edition		Kindergarten	
Lesson Plan (Coding)		Coding Tool	Unplugged
Problem Solving and Innovation <ul style="list-style-type: none"> • Demonstrate an ability to use problem-solving skills in a variety of contexts • Use the processes and skills of an inquiry stance • Use technological problem-solving skills, on their own and with others, in the process of creating and designing 		Specific Expectations <p>4.1 use a variety of strategies to solve problems</p> <p>13.1 state problems and pose questions in different contexts and for different reasons</p> <p>14.3 recognize, explore, describe and compare patterns in the natural and built environment</p> <p>20.5 investigate and describe how objects can be collected, grouped and organized according to similarities and differences</p> <p>24.3 make predictions and observations as part of the process of creating and designing</p>	
Description This fun drawing lesson combines coding terms and sorting animals. By using coding language like IF THEN statements, your students will sort their favorite animals into categories.			
Materials <ul style="list-style-type: none"> • Colouring pencils/markers/crayons • 1 sheet of paper 		Computational Thinking Skills <ul style="list-style-type: none"> • Conditional statements • IF THEN statements 	
Introduction As part of this lesson, students will draw their favourite animals, but to add a coding twist, they will also sort all the animals that they drew. Sorting is an important concept in coding, which can be done using conditional statements. A conditional statement, also known as an IF THEN statement, tells a computer to do one action if a condition is met. For example, IF the power button is pressed, THEN the computer turns on. Computers can't make decisions by themselves, so these types of statements can tell a computer what to do. Sorting and classifying are also an important part of science. While students don't need to know about the scientific classification of animals at this age, they can still use this activity to recognize that animals have different characteristics that make them unique.			
Action To start this lesson, ask your students to draw their favorite animal. In coding, details are very important so give your students the chance to add as many little details as they can (ei: wings, whiskers, horns). For added fun, tell your students to keep their drawing a secret. The class can try to guess the animal based on the characteristics. You will go through a series of			

characteristics that may or may not apply to their animal. If a student has an animal that corresponds with one of those IF statements, they can perform a matching action. Two different examples of things that students can do in response to the IF statements are mentioned further below.

Here are some examples of IF statements that use animal characteristics:

- If your animal has feathers
- If your animal has scales
- If your animal has fur
- If your animal has 4 legs
- If your animal has 2 legs
- If your animal has no legs
- If your animal has a beak
- If your animal has claws
- If your animal likes water
- If your animal eats meat
- If your animal eats plants
- If your animal can make a loud noise
- If your animal is very slow
- **** Create some IF statements of your own****

Here are some THEN statement options:

- Categories: If the characteristics apply, the students move to one corner of the room. If not, they move to another corner. As you go through more characteristics, this will create many categories. You can use this exercise to teach what is different and what is similar.
- Moves and gestures: As you say a characteristic, match a move to go with it. For example, if your animal has feathers, pretend to fly. This option can be adapted for virtual learning.
- For virtual learning, students can turn their camera on/off or sit or stand if the characteristic applies.
- Have students think of different IF or THEN statements that apply to animals

Consolidation/Extension

This activity also gives the opportunity to emphasize that very different animals can have very similar characteristics. For example, birds have beaks, but turtles and tortoises also have beaks. Dogs have fur but so do elephants. Not all animals with feathers can fly. Reptiles have scales but so do fish. To go further with this lesson, see if you can classify some very different animals using the sorting activity or have students attempt to guess each other's animal based

on the characteristics that applied.

Assessment

Assessment can be done to see how well students follow instructions when sorting by characteristics. Students can also be assessed on their animal drawings.