Australian Curriculum: Digital Technologies Years 3–4 assessment task
Student task booklet – Living and non-living things | Assessment focus: data

Student Name _____

Part A

You are going to collect data about living and non-living things in the playground.

1. Tick the things you observe. You could take photos if you have access to a tablet device or camera. You can use these later in an infographic.

- ☐ dirt
- ☐ grass
- ☐ tree
- ☐ ant
- ☐ spider
- ☐ lizard
- ☐ bird
- ☐ playground equipment
- ☐ concrete
- ☐ caterpillar
- ☐ butterfly/moth
- ☐ dragonfly
- ☐ stick
- ☐ rock
- ☐ ball
- ☐ fence
- ☐ flower
- ☐ shrub
- ☐ stone
- ☐ table
- ☐ seat
- ☐ shade cloth
- ☐ fly
- ☐ wall

2. List other things you observe that are not on the list above.

3. Next to the items listed in questions 1 and 2, record how many of each thing you can see. If there are more than 5 of something, choose a quicker way of representing the number. For example:
   a) tally marks
   b) 100 ants = 1 large ant image
   c) your own idea

Part B

4. Next to the items listed in questions 1 and 2, record L, N or P. (L = living, N = non-living, P = a product of something that is or was living)
5. Organise your data in this table.

Living	**Non-living**	**Product of living**

6. Present your data to show whether it is living, non-living or a product of a living thing. Think about who the audience is for this presentation. You could do this on a computer or tablet device or on paper.

Part C

You are going to make a 'Living/non-living/product of living thing' classifier on a computer or tablet device. You will plan your classifier with your teacher as a class and list what a good classifier program would need.

7. With your partner or group, write some questions for your classifier.

8. Write the steps you will need to follow to ask questions (input) and present answers (output). You will need to show two responses for right and wrong answers (branching).

9. You will make your classifier on a computer or tablet device with your partner or group.

10. Your teacher will give you the list of criteria that your class decided was important. Use the list to check to see if the classifier met the criteria. Colour in the smiley face to show if your classifier did what it was supposed to and worked properly.



Marking guide (for the teacher)

Digital Technologies	**Above standard** ***Students*:**	**At standard** ***Students*:**	**Below standard** ***Students*:**
Representation of data	use a variety of tools to classify data sets justify why different data representations suit different contexts define data requirements for their classifier including inputs, choices and possible variables for their classified items for their visual program	classify data sets explain how the same data sets can be represented in different ways define inputs and choices for their classified items in preparation for their visual program	classify data sets with support demonstrate limited understanding of how the same data sets can be represented differently define inputs and choices for their classified items with support
Collecting, managing and interpreting data	collect and manipulate different data independently when creating information and digital solutions	collect and manipulate different data when creating information and digital solutions	collect and manipulate different data when creating information and digital solutions with support
Investigating and defining	design a classifier program independently	design a classifier program with teacher guidance	design components of a classifier program with teacher guidance
Implementing	implement digital solutions by creating a classifier program using algorithms that involve decision-making, user input and variables using a visual programming language	implement digital solutions by creating a classifier program using algorithms that involve decision-making and user input using a visual programming language	attempt to implement limited digital solutions by creating a simplified classifier program using a visual programming language
Evaluating	evaluate their classifier and those of other students against identified needs explain in detail how the classifier program meets the purpose suggest improvements for the classifier	evaluate their classifier against identified needs explain how the classifier program meets the purpose	evaluate their classifier against identified needs with support
Collaborating and managing	use and manage information systems safely and independently to create their classifier supporting their peers, where appropriate	use and manage information systems safely to create their classifier	safely use and manage information systems with support

Teacher comments: