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

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. You could do this on a computer or tablet device or on paper. Think about who the audience is for this presentation.

Part C

You are going to make a 'Living, non-living or product of living thing' classification quiz game on a computer or tablet device. You will plan your quiz game with your teacher as a class and list what a good classification quiz game program would need. Here are two examples made with Scratch:

Simple: scratch.mit.edu/projects/288604818/

Advanced: scratch.mit.edu/projects/288596012/

7. With your partner or group, draw some pictures of things and write questions for the user to answer to determine whether something is living, non-living or the product of a living thing.

8. Write the steps you will need to follow to ask questions (input) and present answers (output). You will need to show 2 responses for right and wrong answers (branching).

9. You will make your classification quiz game on a computer or tablet device with your partner or group. Your teacher might give you links to a tutorial to help you learn how to make the program.

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 classification quiz game met the criteria. Colour in the smiley face to show if your game 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*:**
Representing data	use a variety of tools to classify data sets justify why different data representations suit different contexts define data requirements for their classification quiz game 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
Data collection and Data interpretation	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
Algorithms	describe the sequence of steps and decisions (algorithms) needed for a classification quiz game program which automatically progresses through quiz questions	describe the sequence of steps and decisions (algorithms) needed for a classification quiz game program which responds to user input	describe some steps in a sequence needed for a classification quiz game program
Implementation	implement digital solutions by creating a classification quiz game program using algorithms that involve decision-making, user input and variables using a visual programming language	implement digital solutions by creating a classification quiz game 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 classification quiz game program using a visual programming language
Impact	evaluate their classification quiz game and those of other students against identified needs explain in detail how the classification quiz game program meets the purpose suggest improvements for the classification quiz game	evaluate their classification quiz game against identified needs explain how the classification quiz game program meets the purpose	evaluate their classification quiz game against identified needs with support
Interactions	use and manage information systems safely and independently to create their classification quiz game, supporting their peers where appropriate	use and manage information systems safely to create their classification quiz game	safely use and manage information systems with support

Teacher comments: _____

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