

**Design and Technology:**  
*Project-based Learning* (Book 1)

Published by Prim-Ed Publishing 2021  
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ISBN 978-1-912760-67-1  
PR-70082

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# FOREWORD

*Design and Technology: Project-based Learning* (Book 1 to Book 6) is a series of teacher resource books designed to help you plan for, teach and assess pupils' learning in design and technology using a project-based learning approach. Throughout this series, pupils develop their knowledge, skills and dispositions for working with materials, tools and equipment in a range of contexts while learning about the importance and use of sustainable practices to support environmental health and human survival for future generations.

Each book in the series contains four similarly-themed units which allow pupils to build on their prior knowledge and skills as they progress. These units follow a pupil-centred approach in which pupils build on their understandings of the world around them through hands-on and enquiry-based learning experiences, while the teacher facilitates and guides. Similar assessment checklists are used in each year level to help you assess, guide and extend pupils' learning.

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## Diagnostic Assessment

### OBJECTIVES

In this lesson, pupils demonstrate their prior knowledge of:

- food that comes from plants;
- food that comes from animals;
- where food is bought/obtained; and
- the basic needs of plants.

### LESSON RESOURCES

- A variety of plant- and animal-based foods
- Two hoops - labelled 'Food from plants' and 'Food from animals' (optional)
- Resource sheet
- Internet access - computers, laptops or tablets, etc.
- Where Does Our Food Come From? - Behind the News* (3.16) <https://tinyurl.com/y3w2z873>
- Where Does Our Food Come From? - How is it Made? - Made by Red Cat Reading* (3.36) <https://tinyurl.com/yxh2swes>

### TIPS FOR ADAPTING THE LESSON PLAN

Create an oral activity by using the sorting cards to elicit information about where food can be bought and what plants and animals need. Record pupils' answers as evidence of knowledge.

The 'About the Food We Eat' resource sheet may be used at the beginning of the lesson to find out prior knowledge of all aspects.

Form pairs or small groups at the beginning of each week or fortnight. Pupils maintain these pairs/groups as required for any class activities during that time. Change pairs/groups so that pupils become accustomed to working with different classmates. As pupils become proficient (and quicker) at forming pairs or small groups, they can choose who they work with.



## Diagnostic Assessment

### 1. LESSON STARTER

Play 'Odd One Out'. Display three foods from plants and one from an animal. Pupils select the 'odd one out' and give reasons for their choice. Repeat with three foods from animals and one from a plant.

Display the food items and discuss them. Elicit the words 'food', 'plants' and 'animals' from pupils.

### 2. INTRODUCTION

Select pupils to choose a piece/type of food, and group the foods into two categories - 'Food from plants' and 'Food from animals'.

Provide small groups with a copy of the food sorting cards to sort into 'Food from plants' and 'Food from animals'. Ensure pupils think about the following questions when sorting: *What is the food made from? Do the ingredients come from plants or animals?*

### 3. DEVELOPMENT

Re-use the sorting cards. As a class, individual pupils select a card, name the food and say where it is bought.

Explain that we get food from both plants and animals, so we need to look after them. *How can we look after plants and animals that provide us with food? What do plants and animals need?* Form small groups and discuss. As a class, list words such as 'food', 'water', 'space', 'sun', 'air', 'protection', etc. and read the words together.

Provide each pupil with a copy of the 'About the Food We Eat' resource sheet.

### 4. PLENARY

Watch one of the videos listed in the lesson resources to review what was discussed.

Select pupils to say one sentence explaining the video.

### 5. CONCLUSION

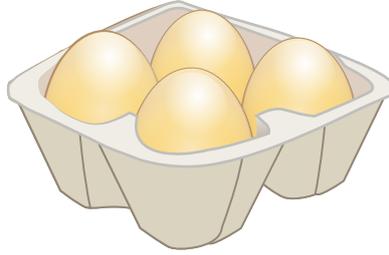
Select pupils to display and tell what they drew and wrote on their resource sheet.

*What are your favourite ready-made foods?  
Where do you buy them?*

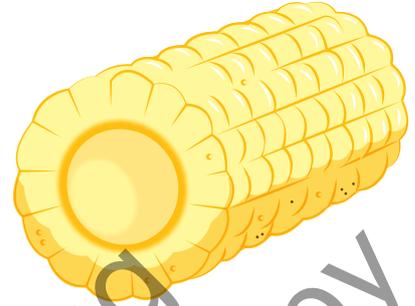
**Food Cards – 1**



cereal



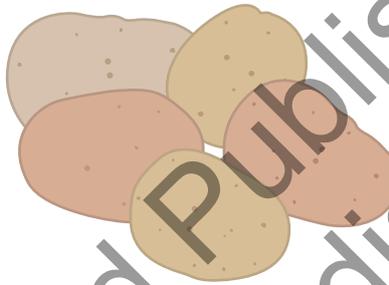
eggs



corn



cheese



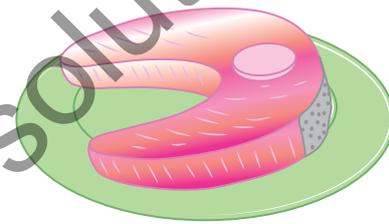
potatoes



milk



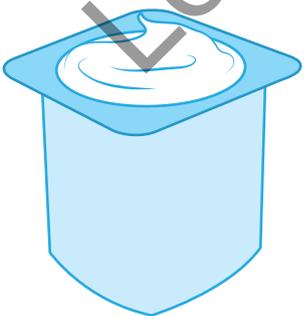
celery



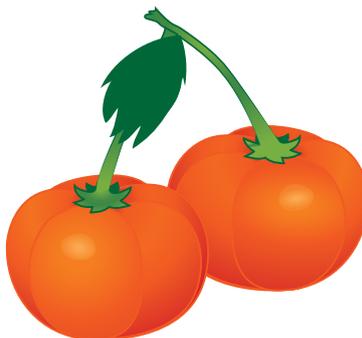
salmon



lettuce



yoghurt

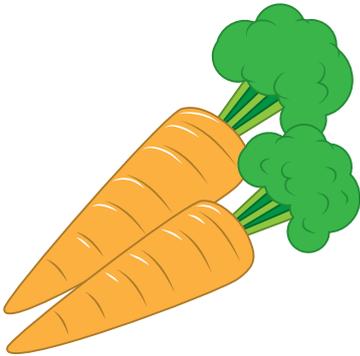


tomatoes

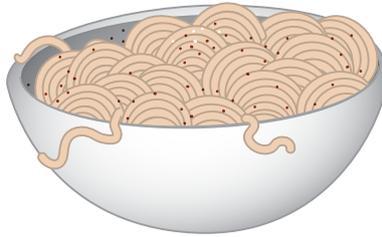


chicken

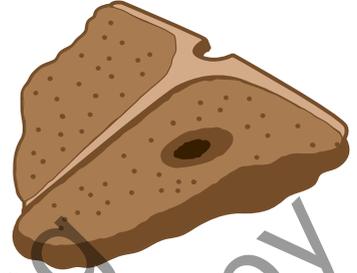
Food Cards – 2



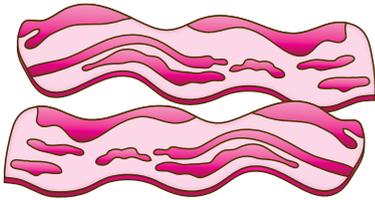
carrots



pasta



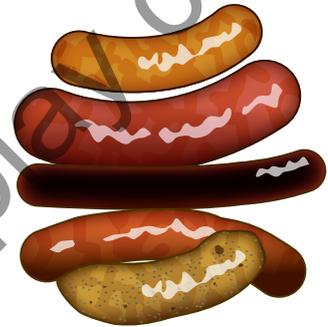
steak



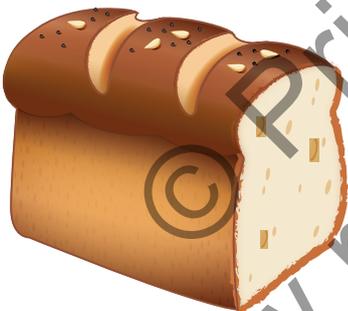
bacon



rice



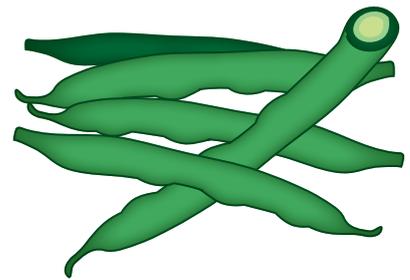
sausages



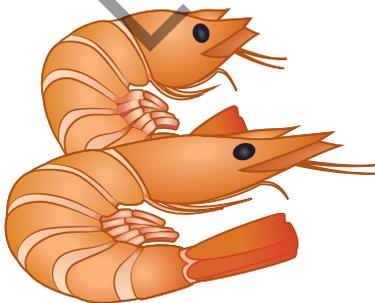
bread



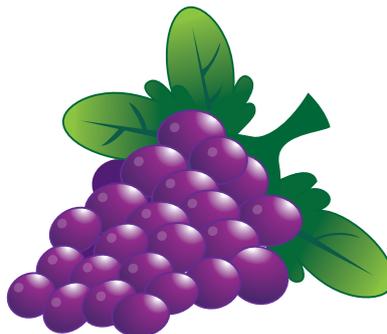
lamb chops



beans



prawns



grapes



honey



**About the Food We Eat**

What the plant needs	What the animal needs
Where I buy it	Where I buy it
Food from a plant	Food from an animal

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**Diagnostic Assessment Questions**

1. What types of food do we eat?
2. What is the food made from?
3. Where do the foods we eat come from?
4. How can we group foods?
5. Which foods come from plants?
6. Which foods come from animals?
7. Where do the ingredients in the food come from?
8. What do the plants that we get food from need?
9. What do the animals that we get food from need?
10. What places sell the food we eat?
11. What are your favourite restaurant and takeaway foods?
12. What people help to provide your favourite restaurant and takeaway foods?