FOR | GRDC

YEAR 5 | **GRAPHING WITH GRAINS**

GRAPHING WITH GRAINS

Year: Five

Outcomes:
Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies (ACMSP119).

Task:
1. Allow students to read through the information about grains on the introduction page.
2. Allow students to interpret the data presented in the pie graph and answer the questions on page one of the 'Graphing with Grains' worksheet.
3. Discuss with students the column graph example, highlighting the features, including: a title, axis labels, a scale increasing by equal amounts from the bottom to the top of the Y axis, and columns representing the different categories.
4. Allow students to work independently to create their own column graph representing Australian Grain Production by Percentage, with or without the use of digital technologies.

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Introduction:

Grains are edible seeds that can be used to make many of the foods we consume in our daily lives. There are lots of different varieties of grains. The most common varieties produced in Australia are: wheat, oats, barley, canola, pulses and sorghum. Australia is one of the largest exporters of grains in the world. Australia's top grain export markets over the past 5 years were: Indonesia, Vietnam, China and the Philippines. with around two thirds of the wheat produced each year exported.
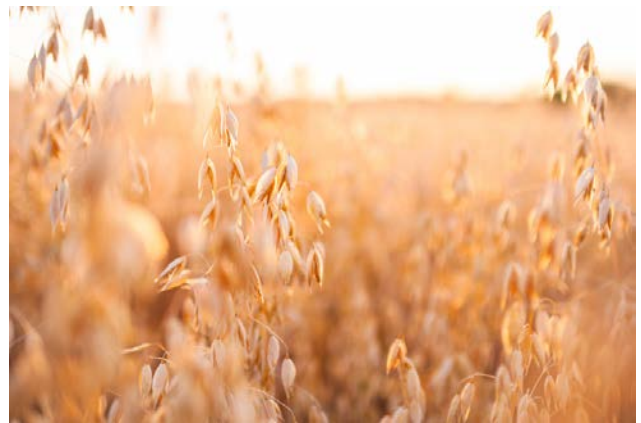

Canola

Wheat

Barley

Oats

Sorghum

Pulse crop

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ANSWERS

<u>Page 1:</u>

a. 10%
b. 11/50, 0.22
c. Wheat
d. 55%
e. Student answers will vary

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The pie graph below displays the percentage of different grains produced in Australia. Interpret the data in the graph to answer the questions.
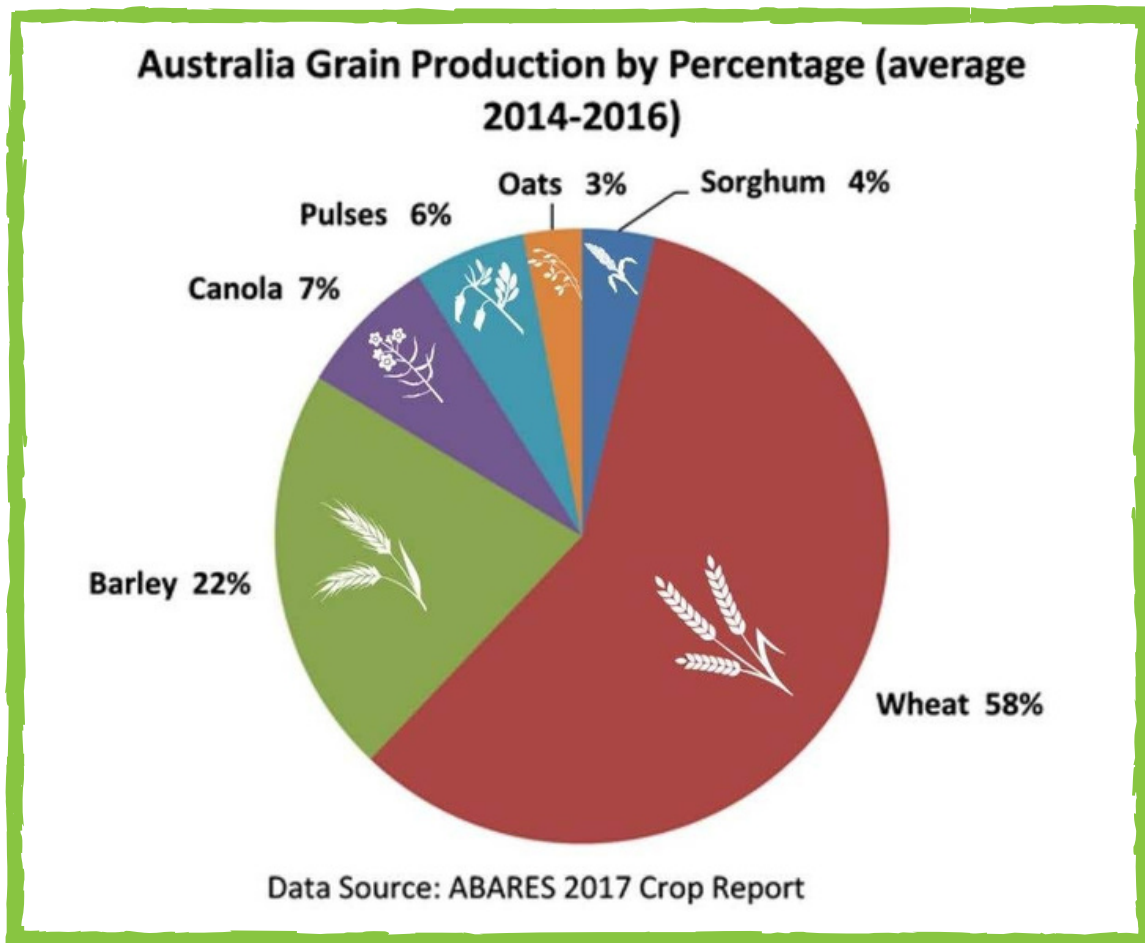

Australia Grain Production by Percentage (average 2014-2016)

Oats 3%
Sorghum 4%
Pulses 6%
Canola 7%
Barley 22%
Wheat 58%

Data Source: ABARES 2017 Crop Report

Image source: PGRD 1001 Grains: Paddock to Plate Yrs 3/4, PIEFA, Primezone Academy, 2021, URL: https://www.primezoneacademy.edu.au/courses/take/grains-paddock-plate-34/texts/16251053-what-are-grains

1. What percentage of Australia's grain production is made up of oats and canola?

2. Barley makes up 22% of Australia's grains production. Record the equivalent fraction and decimal values for 22%.

3. Which grain has the largest production percentage in the graph?

4. What is the percentage difference between the most prominent and least prominent grain produced?

5. Record one question that could be answered by interpreting the data on the pie graph.

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Use the information provided in the pie chart to create a column graph displaying the Average Percentage of Australian Grains Production between 2014-2016. You can create your graph with or without digital technologies.

Use the checklist below to ensure you have included all of the features of a column graph.

☐ Title   ☐ Scale   ☐ Labels

☐ Columns representing the categories of grains.

Column graph example:

Title →

Scale →

Columns representing the categories of grains →

Labels →

Percentage of Wheat Used to Make Products in Australia.

Product	Percentage of Wheat Used
Sweet Products	20%
Flat Bread	10%
Pasta	15%
Bread	20%
Noodles	25%
Won Ton Skins	5%
Steamed Products	5%