# SUPER SEED KIT

## TEACHER INFORMATION

## HOW TO USE THE SUPER SEED KIT IN YOUR CLASSROOM

**Grains Research and Development Corporation (GRDC), Australian Grain Technologies (AGT) and Primary Industries Education Foundation Australia (PIEFA) have partnered to create the Super Seed Kit.**

This kit aims to equip you with hands-on resources and engaging classroom activities to help your students develop an understanding of Australian cropping varieties. Designed with the Science, Design and Technologies and Agricultural student in mind, the kit provides teachers with lessons, resources and information to support experiential learning about grains, oilseeds and pulses.

Curriculum linked lessons will be generated on an ongoing basis to support the **Super Seed Kit** and inspire you with new ideas. Keep up with new lessons by visiting the Primezone website.

### PRIMEZONE WEBSITE:

primezone.edu.au

### GRAINS EDUCATION – PRIMEZONE WEBSITE:

primezone.edu.au/grains-education/

### GRAINS RESEARCH AND DEVELOPMENT CORPORATION WEBSITE:

grdc.com.au

### AUSTRALIAN GRAIN TECHNOLOGIES WEBSITE:

agtbreeding.com.au

GRDC GRAINS RESEARCH & DEVELOPMENT CORPORATION

AGT

Primary Industries Education Foundation Australia

www.primezone.edu.au primezone the place for all your food and fibre resources

# SUPER SEED KIT (cont.)

TEACHER INFORMATION

## THE SUPER SEED KIT CONTAINS:

- ✔ Twelve vials containing significant agricultural seeds, including:

### GRAINS

- Wheat
- Barley
- Oats
- Maize
- Sorghum

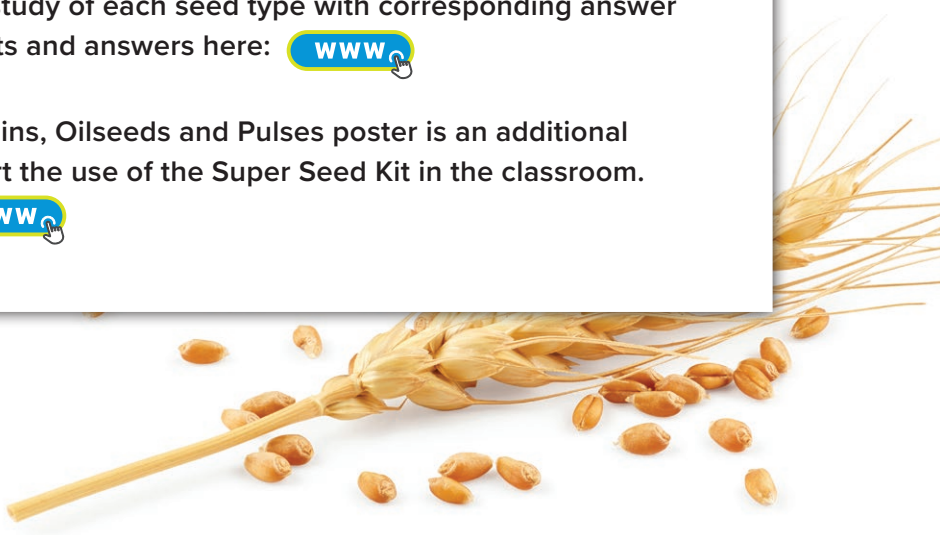
### OILSEEDS

- Canola
- Sunflowers
- Safflowers

### PULSES

- Chickpeas
- Field Peas
- Lentils
- Lupins

- ✔ Twelve matching seed packets for student observation, handling and planting experiments
- ✔ Germination dishes and blotting paper
- ✔ A ruler
- ✔ Student worksheets for the study of each seed type with corresponding answer sheets. Download worksheets and answers here: www
- ✔ **Optional:** The Australian Grains, Oilseeds and Pulses poster is an additional resource designed to support the use of the Super Seed Kit in the classroom. It can be ordered here: www



# STUDY YOUR SEEDS!

## INTRODUCTORY ACTIVITY

**Use this lesson as an introductory activity to help familiarise your students with the Super Seed Kit and it's contents. The study may be completed individually or as a collaborative learning activity in small groups.**

### LEARNING OBJECTIVE

Students handle, examine and research a range of grains, oilseeds and pulses to understand their unique features and their end uses.

### ACTIVITY LENGTH

30 min (per seed study)

### SUCCESS CRITERIA

Students complete seed study worksheets (measuring, describing, sketching and researching different seeds).

## BACKGROUND INFORMATION

The production of grain, oilseed and pulse crops in Australia is a vital component of our agricultural industry. Many foods we eat on a daily basis have originally come from the types seeds provided in the **Super Seed Kit**.

**Grains** (commonly referred to as **cereal grains**) are the edible seeds of certain grasses belonging to the Poaceae family.

**Oilseed** crops are grains grown so that we can extract the oil which is contained in their seeds.

In Australia, grain legumes are generally referred to as pulses. **Pulses** grow inside of pods and come in a range of shapes, sizes and colours.

Although there are over 25 different types of grains, oilseeds and pulses grown in Australia, the **Super Seed Kit** examines 12 of our most commonly grown crops.

# STUDY YOUR SEEDS! (cont.)

INTRODUCTORY ACTIVITY

## MATERIALS

- ✔ Seed vials and packets
- ✔ Ruler
- ✔ Research tools (internet access)
- ✔ Seed study worksheets

*Schools are responsible for generating their own risk assessment for this activity.*

## INSTRUCTIONS

1. Students choose the type of grain seed, oilseed or pulse seed they would like to study.

*Note: Students may complete multiple studies of different seed types.*

2. Distribute the appropriate seed vials, seed packets and worksheets to students.

3. Students examine the seeds in the vials. The seeds in the packets may be removed for closer examination and handling.

4. After close examination, students complete and record responses to the following tasks:

   - measure the length and width of the seed in millimeters
   - count the number of seeds in the vial
   - describe the seed
   - sketch the seed
   - determine whether the seed is a grain, oilseed or pulse.

5. Students research and record:

   - the genus name of the plant
   - the Australian growing areas of the crop
   - two end products of the plant.

6. Invite students to present their findings to their peers and make comparisons between the different seeds/crops that were studied. Ask students to reflect and comment on the foods they eat that are the end products of the seeds in the **Super Seed Kit**.