

GIANT PUMPKIN LEARNING RESOURCE



YEAR 9/10

Develop project plans using digital technologies to plan and manage projects individually and collaboratively taking into consideration time, cost, risk and production processes

ACTDEP052

- producing, explaining and interpreting drawings; and planning production timelines using digital technologies
- creating production flowcharts using digital technologies to ensure efficient, safe and sustainable sequences
- establishing materials and equipment needs using digital technologies such as spreadsheets
- collaborating to develop production plans for equitable distribution of work
- investigating manufacturing processes to identify strategies to enhance production

Learning outcomes:

The Giant Pumpkin Competition teaches students how to take care for and grow their own food by growing pumpkins.

Students will be able to:

- Produce a production flowchart for an agricultural product
- Identify and record materials required to grow a pumpkin
- Investigate strategies to increase growing efficiency
- Utilise digital technology for the recording and presentation of ideas and data.

Competition materials:

- Competitors will be provided with pumpkin seeds to be used

Learning materials:

Teachers will have access to learning materials to assist with enriching the learning process.

GIANT PUMPKIN-GROWING SCHEDULE

1. The information below summarises the growing information for giant pumpkins, using this information and your own research, complete the following table

Efficient sequence

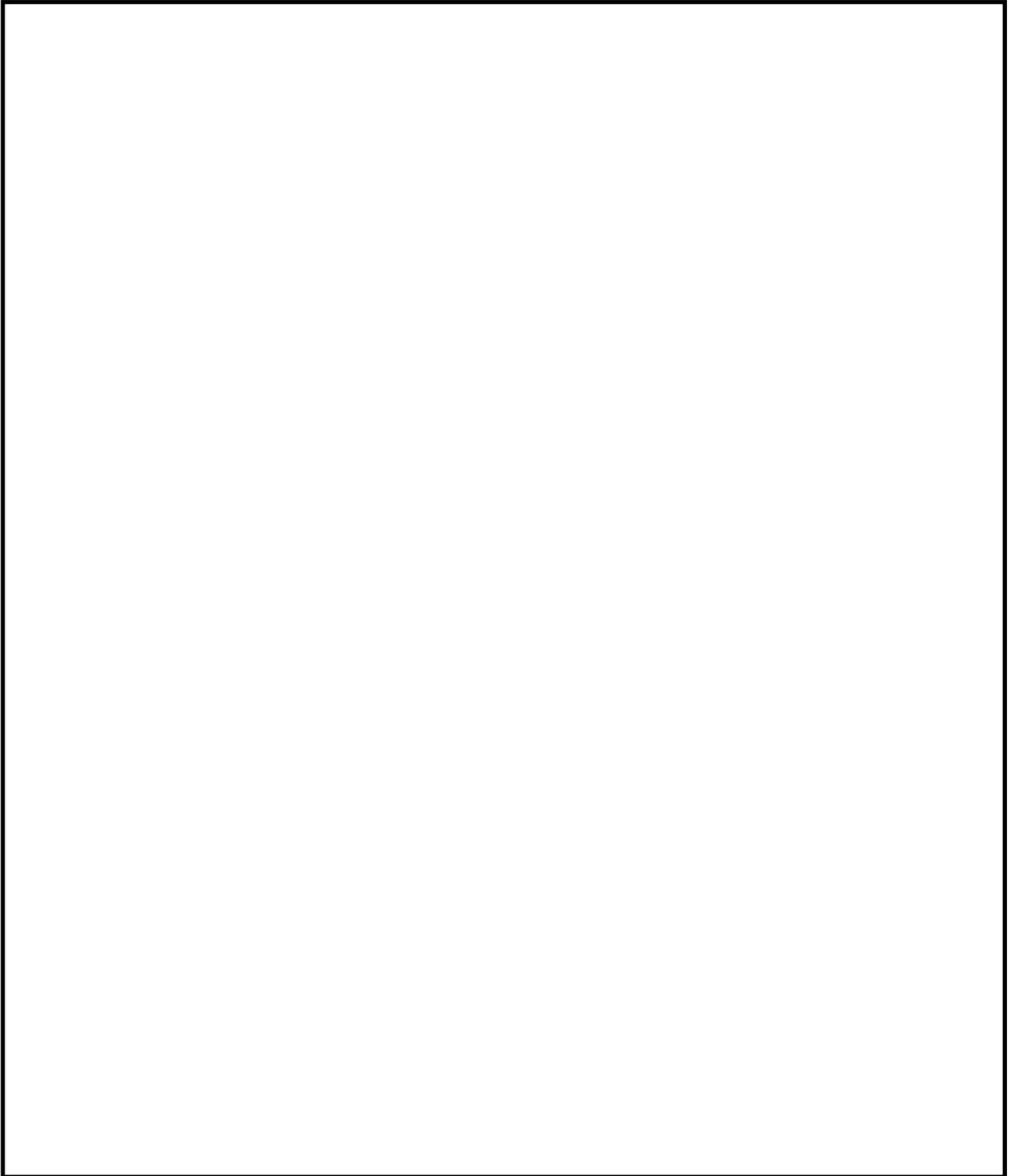
Safe sequence

Sustainable sequence

- *Plant your Atlantic Giant Pumpkin seed by the end of December 2019*
- *Your pumpkin patch should be well drained, spacious and sunny, but in a wind protected area.*
- *before sowing, soak seeds for an hour or two in lukewarm water.*
- *Sow a couple of seeds pointy end down in a light, free-draining compost.*
- *The seed should germinate in about 3-7 days.*
- *For a longer growing season (and a bigger pumpkin) you can try hand pollination. This can be done by finding a female flower on the main vine as far away from the base of the plant as possible. You can hand pollinate by removing some male flowers and using them to dab the pollen onto the centre of newly-opened female flowers.*
- *Your pumpkin will grow very quickly (3.5-5.5kg per day) so it will need weekly feeding with liquid manure or liquid compost.*
- *A giant pumpkin takes approximately four and a half months to grow*
- *Once established, prune back your vine to one fruit*
- *Pumpkins get sunburnt too – cover it with a sheet in the hotter parts of the day.*
- *A giant pumpkin will only last approximately two months once cut off the vine.*

GIANT PUMPKIN-GROWING SCHEDULE

2. Using the information you have gathered, generate a production timeline to plan your pumpkins growth in time for entry.



3. On your timeline, allocate roles to each class member to ensure everyone has an opportunity to help grow the pumpkin

GIANT PUMPKIN-GROWING SCHEDULE

4. Identify the inputs, processes and outputs for your giant pumpkin enterprise

Inputs

Processes

Outputs

5. With the input list you have generated, research the cost of each input and generate a shopping list on excel.

6. Research pumpkin farming and answer the following questions:

- A. Identify a technology that could make growing your pumpkin more efficient
- B. Describe how your growing will become more efficient using this technology
- C. Explain the practice behind this technology
- D. Create a poster advertising the technology to a pumpkin farmer

GIANT PUMPKIN-GROWING DATA

Date planted

Number of seeds planted

Growing medium

Date of germination

Number of seeds germinated

Plant watering day

Plant water amount

1. Calculate the germination percentage of your seeds

2. Identify why your watering amount will change through the growing period

3. Identify why the growing medium is important for the success of your plant

GIANT PUMPKIN-GROWING DATA

4. Describe the main factors of success for your plant

5. Identify how each success factor will be measured.

6. Create a shared spreadsheet for your class to use to help measure your success factors

7. Explain why it is important that farmers record data
