



WORKSHEET 1A: GROWING SPINACH

Name: _____

Spinach (*Spinacia oleracea*) is a nutritious leafy green vegetable. Groups should research the growing conditions for their assigned vegetable and work in their allocated groups to complete one worksheet:

SPINACH BASICS

1. What is the scientific name for common spinach?

2. List three other plants that are sometimes called 'spinach'.

3. What is the ideal height for spinach plants to be picked for consumption?

4. In which seasons does English spinach grow best?

PLANTING SPINACH

1. Describe the ideal soil conditions for growing spinach.



WORKSHEET 1A: GROWING SPINACH

2. What is the recommended spacing between spinach seeds? In commercial beds approximately how many plants are there per square metre?

CARE AND MAINTENANCE

1. How often should spinach be watered?

PEST CONTROL

1. What are the main pests that affect spinach?



WORKSHEET 1A: GROWING SPINACH

HARVESTING

1. Describe how spinach is harvested by commercial farmers.

Blank space for student response to the harvesting question.

REFLECTION

1. Research and briefly explain how climate change might affect spinach cultivation in Australia.

Blank space for student response to the reflection question.



WORKSHEET 1B: GROWING LETTUCE

Name: _____

Lettuce (*Lactuca sativa*) is a popular vegetable grown in Australia. Groups should research the growing conditions for their assigned vegetable and work in their allocated groups to complete one worksheet.

LETTUCE BASICS

1. List three types of lettuce.

2. When is commercial lettuce ready to be picked?

3. Describe the preferred soil conditions for growing lettuce.

PLANTING LETTUCE

1. List two ways to start growing lettuce.

2. What is the ideal spacing between lettuce plants?



WORKSHEET 1B: GROWING LETTUCE

CARE AND MAINTENANCE

1. How often should lettuce be watered?

Blank space for answer.

PEST CONTROL

1. Name the main pests that affect lettuce crops.

Blank space for answer.

HARVESTING

1. Describe how lettuces are harvested by commercial farmers.

Blank space for answer.

2. What causes lettuce to become bitter, and how can this be prevented?

Blank space for answer.



WORKSHEET 1B: GROWING LETTUCE

REFLECTION

1. Research and briefly explain how climate change might effect lettuce cultivation in Australia.



WORKSHEET 2: DEVELOP A DESIGN BRIEF: LEAFY GREEN INNOVATION

Name:

Use this worksheet to guide you as you design a new packaging product for leafy greens. Be creative and think critically about how your product can meet the needs of your target audience.

IDENTIFY THE PROBLEM OR OPPORTUNITY

What specific need or opportunity exists for a new packaging product related to leafy greens to be developed?

TARGET AUDIENCE

Who will benefit from your product? (e.g. home cooks, restaurants, farmers, etc.)

PROPOSED SOLUTION

Describe your product idea. What is it and how does it work? How will your product encourage sustainability?



WORKSHEET 2: DEVELOP A DESIGN BRIEF: LEAFY GREEN INNOVATION

KEY FEATURES

List at least three key features of your product that make it effective or unique.

MATERIALS AND SYSTEMS

What materials or systems will you consider using to create your product? (Think about sustainability and practicality.)



**WORKSHEET 2: DEVELOP A DESIGN BRIEF:
LEAFY GREEN INNOVATION**

INITIAL SKETCH

Draw a simple sketch of your product/prototype idea below.

Blank area for drawing a simple sketch of your product/prototype idea.

NEXT STEPS

What are the next steps you need to take to develop your idea further? (e.g., research materials, create a prototype)

Blank area for writing the next steps to develop your idea further.

APPENDIX 1: NUTRITION CARDS

SPINACH

Nutrients per 1 cup (30g) raw spinach:

Kilojoules: 29
Protein: 0.9g
Carbohydrates: 1g
Fibre: 0.7g
Vitamin K
Vitamin C
Vitamin A
Manganese
Folate
Iron
Zinc
Copper

Key Benefits:

Rich in iron for healthy blood.
Contains antioxidants zeaxanthin and lutein.
Supports eye health.



COS (ROMAINE) LETTUCE

Nutrients per 1 cup (36g) raw:

Kilojoules: 33
Protein: 0.6g
Carbohydrates: 1.5g
Fibre: 1g
Vitamin K
Vitamin C
Vitamin A
Manganese
Folate
Calcium
Iron
Zinc
Copper

Key Benefits:

High water content for hydration.
Supports heart health with potassium.
Contains beta-carotene for eye health.



ICEBERG LETTUCE

Nutrients per 1 cup (72g) raw iceberg lettuce:

Kilojoules: 42
Protein: 0.6g
Carbohydrates: 1.5g
Fibre: 0.9g
Vitamin K
Vitamin C
Vitamin A
Manganese
Folate
Calcium
Iron
Zinc
Copper

Key Benefits:

High water content for hydration.
Contains small amounts of antioxidants.



BUTTER LETTUCE

Nutrients per 1 cup (55g) raw butter lettuce:

Kilojoules: 29
Protein: 0.7g
Fibre: 0.5g
Vitamin K
Vitamin C
Vitamin A
Manganese
Folate
Calcium
Iron
Zinc
Copper

Key Benefits:

Rich in vitamin A for eye health.
Supports bone health with vitamin K.
Contains antioxidants that may reduce inflammation.



CORAL LETTUCE

Nutrients per 1 cup (47g) raw coral lettuce:

Kilojoules: 33
Protein: 0.5g
Fibre: 0.6g
Vitamin K
Vitamin C
Vitamin A
Manganese
Folate
Calcium
Iron
Zinc

Key Benefits:

Provides vitamin A for skin health.
Supports blood clotting with vitamin K.



RADICCHIO

Nutrients per 1 cup (40g) raw radicchio:

Kilojoules: 37
Protein: 0.6g
Fibre: 0.4g
Vitamin K
Vitamin C
Vitamin A
Manganese
Folate
Calcium
Iron
Zinc
Copper

Key Benefits:

Extremely high in vitamin K for bone health.
Contains antioxidants that may reduce inflammation.
Supports digestive health with inulin (a prebiotic fibre).



WILD ROCKET (ARUGULA)

Nutrients per 1 cup (20g) raw wild rocket:

Kilojoules: 20
Protein: 0.5g
Carbohydrates: 0.7g
Fibre: 0.3g
Fat: 0.1g
Vitamin K
Vitamin C
Manganese
Folate
Calcium
Iron
Zinc
Copper



Key Benefits:

Exceptionally rich in vitamins K and C for bone health and immune function.

Contains antioxidants such as beta-carotene, lutein, and zeaxanthin that may help protect against chronic diseases.

APPENDIX 2: RECIPE CARDS

SPINACH AND STRAWBERRY SALAD

Ingredients

- 4 cups baby spinach
- 1 cup strawberries, sliced
- 1/4 cup feta cheese, crumbled
- 1/4 cup walnuts, chopped
- 1/4 cup pine nuts
- 2tbsp balsamic vinaigrette

Method

1. In a large bowl, combine the spinach and strawberries.
2. Sprinkle feta cheese, walnuts and pine nuts on top.
3. Drizzle with balsamic vinaigrette and toss gently to combine.

Nutritional Information (per serving)

- Kilojoules: 1265
- Protein: 10g
- Fat: 22g
- Carbohydrates: 15g
- Fibre: 5g



LETTUCE WRAPS WITH CHICKEN

Ingredients

- 450g ground chicken
- 1tbsp soy sauce
- 1tbsp sesame oil
- 1 head butter lettuce, leaves separated
- Optional toppings: shredded carrots, chopped peanuts, coriander, spring onions

Method

1. In a skillet, heat sesame oil over medium heat.
2. Add ground chicken and cook until browned.
3. Stir in soy sauce and cook for another minute.
4. Serve chicken in lettuce leaves with optional toppings.

Nutritional Information (per serving)

- Kilojoules: 920
- Protein: 25g
- Fat: 12g
- Carbohydrates: 5g
- Fibre: 1g



ROCKET PESTO PASTA

Ingredients

- 2 cups rocket
- 1/4 cup pine nuts (or walnuts)
- 1/4 cup Parmesan cheese, grated
- 2 cloves garlic
- 1/3 cup olive oil
- 280g of cherry tomatoes, halved or quartered
- 100g of baby Bocconcini
- Salt and pepper to taste
- Cooked pasta of choice (2 cups)

Method

1. In a food processor, combine rocket, nuts, Parmesan cheese, garlic, salt, and pepper.
2. With the processor running, slowly add olive oil until smooth.
3. *Optional:* If you want to roast the tomatoes: Place tomatoes on baking sheet and drizzle with 1 tablespoon olive oil. Season with ½ teaspoon salt and 1/8 teaspoon pepper. Roast in oven for 18-20 minutes, or until tomatoes are very juicy but not broken down.
4. Add pesto, tomatoes, and half the Bocconcini to cooked pasta.
5. Toss pesto with cooked pasta and tomatoes until well coated.
6. Add some extra whole rocket leaves and remaining Bocconcini.

Nutritional Information (per serving)

- Kilojoules: 2581
- Protein: 31g
- Fat: 40g
- Carbohydrates: 36g
- Fibre: 3g



RADICCHIO SALAD WITH CHICKPEAS

Ingredients

- 2 cups radicchio, chopped
- 1 can (400g) chickpeas, rinsed and drained
- 1/4 cup red onion, thinly sliced
- Handful of spring onion (chopped)
- Juice of one lemon
- Salt and pepper to taste

Method

1. In a bowl, combine radicchio, chickpeas, red onion and spring onion.
2. Drizzle with lemon juice and season with salt and pepper.
3. Toss gently to combine.

Nutritional Information (per serving)

- Kilojoules: 753
- Protein: 8g
- Fat: 2g
- Carbohydrates: 30g
- Fibre: 6g



SPINACH SMOOTHIE

Ingredients

- 2 cups fresh spinach leaves
- 1 banana
- 1 cup almond milk (or any milk)
- Optional: honey or maple syrup to taste

Method

1. Combine spinach, banana, and almond milk in a blender.
2. Blend until smooth; add honey if desired for sweetness.

Nutritional Information (per serving)

- Kilojoules: 628
- Protein: 3g
- Fat: 3g
- Carbohydrates: 30g
- Fibre: 3g

