

## **EDUCATOR NOTES:**

## Making a small wicking bed

## **Learning and Engagement Approach**

This activity is designed to engage young learners aged from 7 - 13.

The activity is intended to:

- o provide instructions about making a small wicking bed
- o demonstrate how materials can be upcycled
- o make a small, productive planter-box
- o increase awareness of water use
- o apply principles of science, sustainability and design and technology.

## **Safety Considerations**

- Check the weather before conducting any outdoors activity. If there is going to be extreme temperatures, storms or high wind, postpone the activity.
- Ensure that everyone is wearing closed shoes, hats and sunscreen and has a water bottle handy.
- Keep any allergy plan information at hand and any associated allergy medication.
- Minimise the risk of inhalation of airborne microorganisms by wetting the soil or potting mix prior to use. Use an approved dust mask when doing this.
- PVC pipe is difficult to cut. Always use a vice and proper cutting equipment that you are trained to use to cut the PVC pipe. You can ask for pipe to be pre-cut from the hardware store
- Implement manual handling procedures when lifting soil, gravel, etc.

#### **Materials and References**

- Polystyrene boxes can often be sourced from fruit and vegetable shops.
- PVC offcuts can often be sourced from plumbing supply shops.
- The remainder of the materials can be sourced from your local hardware/garden supply shop.

## **Site Suggestions**

## Choosing a location for your small wicking bed

- Most food crops need a good amount of direct sun, so situate your wicking bed in a location that will get good sun.
  - Research the amount of sunlight your plants will need by reading the information on the seed packet or seedling labels.
- Your wicking bed will become heavy once it has been made, so make sure you build it in its final location.



## **Educator Tips**

## Drawing a cross-section

Introduce the activity sheet and demonstrate how the cross-section will look as if you have made a vertical slice through the wicking bed box. Explain that the children will be illustrating each part of the wicking bed as it is built on the activity sheet. You can use the word list from the activity sheet to help.

To make a vertical cross-section, imagine slicing down through the middle of the wicking bed. You would see something similar to this:



Source: ABC Gardening Australia

#### **Aligning this Activity**

- Creating a beneficial garden: planting
- Making a large wicking bed
- Creating a food garden sequence

#### **Extension Activities**

#### Extension 1

Now that you have created your wicking bed, how could you monitor how much water your wicking bed needs? Could you design an investigation that measures how much water is needed per day? Or could you measure the mass of the wicking bed at the beginning of each day to find out how much water use has occurred?

#### **Extension 2**

Research 'capillary action' experiments and conduct your own capillary action trial. Can you explain how water can move upwards, against gravity?



## **Community Engagement**

Use <u>The National Landcare Directory</u> to find a community environmental 'care' group near you. Landcare groups have experience in understanding plants and caring for them, we encourage you to connect with them.

Look to the <u>Junior Landcare Community Page</u> for organisations to contact to help support growing plants.

Use this <u>Australian City Farms and Community Gardens Network map</u> to find a City Farm or Community Garden near you to get some ideas for your gardening project

#### **Curriculum and Framework Links**

#### **SCIENCE**

Year 2: ACSSU030, ACSHE035 Year 3: ACSSU044, ACSIS054

Year 4: ACSHE062, ACSIS064

Year 5: ACSHE083

Year 6: ACSSU094, ACSHE100

Year 7: ACSHE120 Year 8: ACSHE135

## **HUMANITIES AND SOCIAL SCIENCES**

Year 2: ACHASSI042

Year 3: ACHASSI052, ACHASSI059, ACHASSI060 Year 4: ACHASSI080, ACHASSK088, ACHASSK090

Year 5: ACHASSI102, ACHASSK120 Year 6: ACHASSI122, ACHASSI130

#### **DESIGN AND TECHNOLOGIES**

Year 2: ACTDEK003

Year 3 & 4: <u>ACTDEP017</u> Year 5 & 6: ACTDEP019

Year 7 & 8: ACTDEK032

#### **HEALTH AND PHYSICAL EDUCATION**

Year 2: <u>ACPPS018</u>, <u>ACPPS022</u>, <u>ACPPS023</u>

Year 3 & 4: <u>ACPPS036</u>, <u>ACPPS040</u>, <u>ACPPS041</u>

Year 5 & 6: <u>ACPPS054</u>, <u>ACPPS059</u> Year 7 & 8: <u>ACPPS073</u>, <u>ACPPS078</u>

## **ETHICAL UNDERSTANDING**

Exploring values, rights and responsibilities

#### PERSONAL AND SOCIAL CAPABILITY

Social awareness



## **CURRICULUM CONNECTIONS**

**Outdoor Learning** 

# CROSS CURRICULUM PRIORITY

Sustainability

MY TIME, OUR PLACE: FRAMEWORK FOR SCHOOL AGE CARE

Outcome 2 and 4