



WESTERN NEW ENGLAND UNIVERSITY

COLLEGE OF PHARMACY AND HEALTH SCIENCES

ROOTS OF WELLNESS

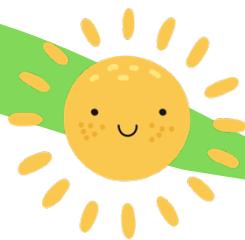
Community Outreach and Summer
Programs
Activity Booklet



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INTRODUCTION

Hello young gardeners and future health professionals! We are thrilled to have you join us in the medicinal garden where you will have a chance to dig in and learn how food can serve as medicine, how to take care of your plants, and how gardens help sustain our nutrition and communities.

Happy planting and use this activity booklet as your guide while you make over the garden and explore how you can use plants to make a difference!

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FOOD AS MEDICINE?



COMMON PLANTS FOUND IN A MEDICINAL GARDEN

A medicinal garden is a garden that has plants that are used for healing and promoting health!

See the information below for a list of common plants found in a medicinal garden!

1. Lavender (*Lavandula* spp.)

- Uses: Calming, relieves anxiety, improves mood, for cramps, soothes minor pain.
- How to Use: Tea, essential oil, sachets for relaxation, infused in oils for skin care.

2. Echinacea (*Echinacea purpurea*)

- Uses: Common cold
- How to Use: Tea, tinctures, or capsules at the first sign of illness.

3. Peppermint (*Mentha x piperita*)

- Uses: Relieves indigestion, tension headache, pressure ulcer, chemotherapy-induced nausea and vomiting
- How to Use: Tea, essential oil (for aromatherapy or topical pain relief).

4. Lemon Balm (*Melissa officinalis*)

- Uses: Reduces stress, improves mood, antiviral (may help with cold sores).
- How to Use: Tea, tinctures, or infused in honey.

5. Rosemary (*Rosmarinus officinalis*)

- Uses: Enhances memory
- How to Use: Tea, culinary herbs, or essential oil for focus.

6.. Aloe Vera (*Aloe barbadensis miller*)

- Uses: Acne, soothes burns, psoriasis, diabetes, constipation, oral Ulcers, obesity
- How to Use: Fresh gel applied directly to skin, juice

7. Garlic (*Allium sativum*)

- Uses: Diabetes, supports heart health, reduces blood pressure, periodontitis.
- How to Use: Raw (for maximum benefits), cooked, or as a tincture.

FOOD AS MEDICINE?

See if you can find words you have learned about
so far in the word search below!

P R E S S U R E W P G F Y V I
E S S E N T I A L N A D D E S
G N I L A E H A I M W L O R G
T U R Q E C N M L T F V O A A
A N F V O T L A H J E I L E R
M N I L S A B N V T W A B Q D
R E D M C E S O O E W X K G E
E A D C R X T M I U S O C G N
D N W I C E L E S C I L R A G
N X D A C B P L B S O Y E G A
E I R X M I Z P P A E R O J A
V E W S B R N H E Q I N D I F
A T D K P R M E Q P L D L W L
L Y G I A E C A N I H C E L S
G I J N R O S E M A R Y W A I

ALOE
VERA
BLOOD
COLD
ESSENTIAL
GROWTH
LAVENDER
OIL
PRESSURE

ANXIETY
CALMING
DIABETES
GARDEN
HEALING
LEMON
PEPPERMINT
ROSEMARY
TEA

BALM
CARE
ECHINACEA
GARLIC
ILLNESS
MEDICINE
PLANTS
SKIN

NUTRITION BASICS!

Medicinal gardens help support basic nutrition and can be used to help with immune system function, digestion and inflammation control! See how plants can help our bodies below!

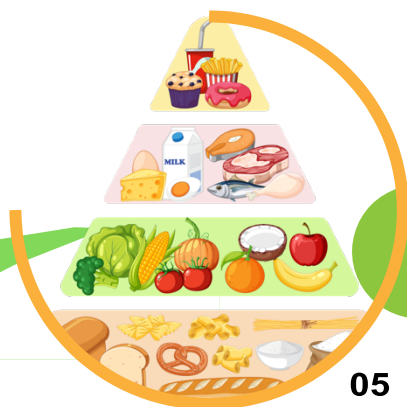
Micronutrients- Medicinal plants are rich in micronutrients like vitamins, minerals and antioxidants.

Digestion Support- Plants can help with digestion, support gut health and soothe inflammation.

Anti-inflammatory Properties- Many plants are rich in flavanoids and polyphenols which help reduce inflammation and stress associated with diabetes, heart disease and cancer.

Immune System Support- Herbs can help stimulate immune cells and act as antibacterial/antiviral agents.

Mood, Stress and Sleep Support- Plants can help support our mental health too! Some medicinal herbs can help manage stress.



NUTRITION BASICS ACTIVITY

Medicinal gardens help support basic nutrition and can assist with immune system function, digestion, and inflammation control. Fill in the blanks below using the previous page to reinforce how plants can be nourishing and healing!

1. Medicinal gardens help support basic nutrition and can assist with _____, _____, and inflammation control.
2. ****Micronutrients**** – Medicinal plants are rich in _____, _____, and _____.
3. ****Digestion Support**** – Plants can help with _____, support _____ health, and soothe _____.
4. ****Anti-inflammatory Properties**** – Many plants contain _____ and _____ that help reduce inflammation and stress linked to _____, _____ disease, and _____.
5. ****Immune System Support**** – Herbs can help stimulate _____ and act as _____/ _____ agents.
6. ****Mood, Stress and Sleep Support**** – Some medicinal herbs can help manage _____ and support _____ health.

GARDENING SAFETY: PROTECT YOURSELF WHILE YOU PLANT!



Gardening is fun and keeps you active and contributing to the environment. There are some dangers associated with gardening and it is important to remember ways to stay safe below are some tools to help avoid injury.

Gloves- Help protect your hands from fertilizer and pesticides which can be in the soil. They also help prevent blisters and injuries. Open wounds can increase risk for infection so glove up!

Gardening tools- These items help you dig, rake, remove roots and much more, but remember they can be sharp! Use caution when using them.

Posture & Knee Pads- When gardening you can be in the same place for some time. Check your posture and use knee pads to help avoid back strain and injury.

Sunscreen- It is important to wear sunscreen when in the sun for an extended period of time. UV rays can be harmful so apply sunscreen 15 minutes before gardening and make sure it is at least 30 SPF. Cover any exposed parts of your body and use at least 2 tablespoons!

Now that we have covered gardening safety, we can get started with gardening!

P.S. don't forget your sunscreen!



GARDENING TOOLS ACTIVITY



Label the Categories

Instructions: Fill in the blanks with the correct category.

1. A soil knife and hand cultivator are examples of _____ tools.
2. A garden rake and shovel are used for _____.
3. A hose nozzle and sprinkler are types of _____ tools.

MATCH THE TOOL TO ITS FUNCTION

Instructions: Write the correct letter next to each description, some of these tools will have multiple uses!

TOOLS:

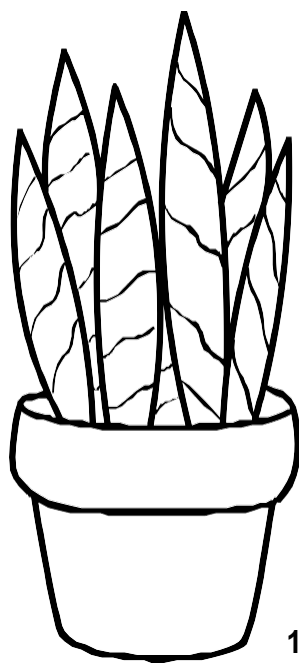
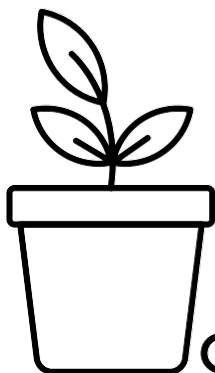
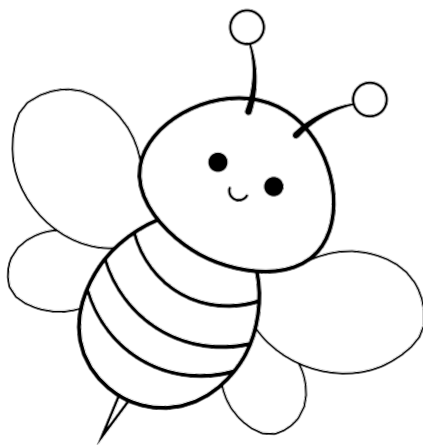
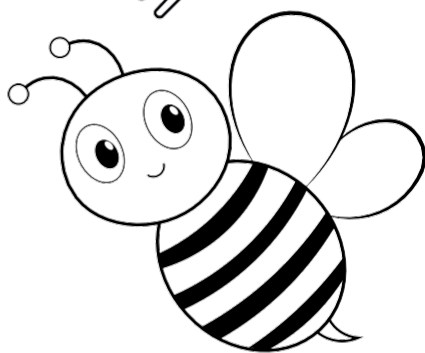
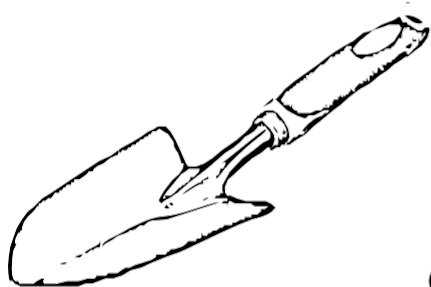
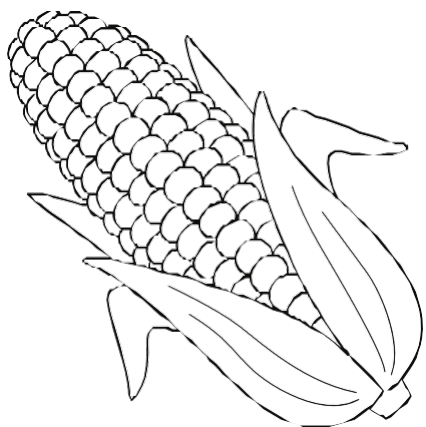
- A. HAND TROWEL
- B. GARDEN RAKE
- C. WATERING CAN
- D. HAND PRUNERS
- E. SOIL SCOOP
- F. SPRINKLER
- G. GARDENING FORK
- H. HOSE NOZZLE
- I. GARDEN HOE
- J. GARDEN TILLERS



DESCRIPTIONS:

- 1. ____ USED TO GENTLY WATER PLANTS WITH PRECISION.
- 2. ____ BREAKS UP AND TURNS LARGE AREAS OF SOIL BEFORE PLANTING.
- 3. ____ CUTS SMALL BRANCHES OR STEMS CLEANLY.
- 4. ____ SCOOPS AND MOVES LOOSE SOIL OR COMPOST.
- 5. ____ LOOSENS AND BREAKS UP SOIL IN SMALLER SPACES.
- 6. ____ SPREADS WATER EVENLY OVER A WIDE AREA.
- 7. ____ DIGS SMALL HOLES FOR SEEDS OR TRANSPLANTING.
- 8. ____ PULLS WEEDS FROM THE ROOT.
- 9. ____ COLLECTS AND SMOOTHS OUT SOIL OR LEAVES.
- 10. ____ CARRIES WATER BY HAND TO INDIVIDUAL PLANTS.

COLORING ACTIVITY



LET'S GET GROWING!

Garden Bed Clean-up!

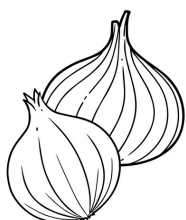
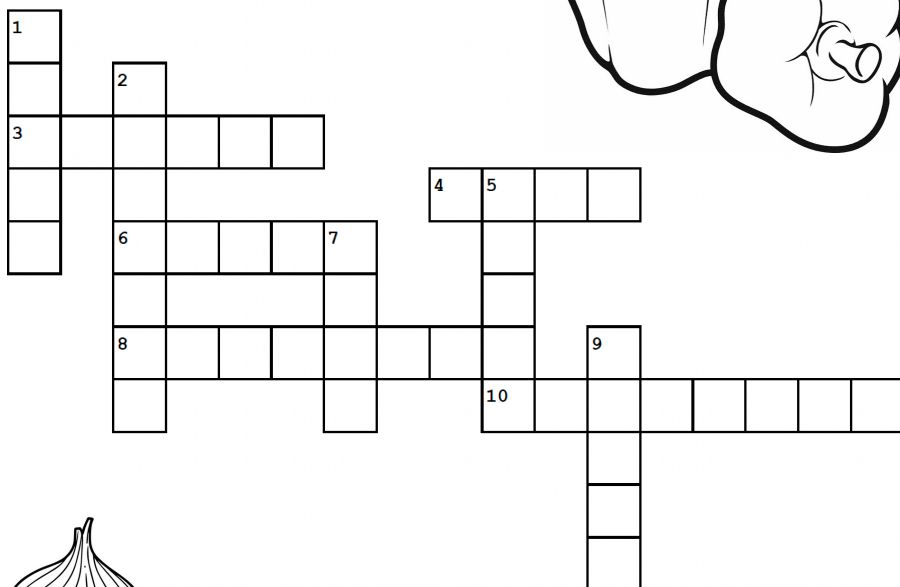
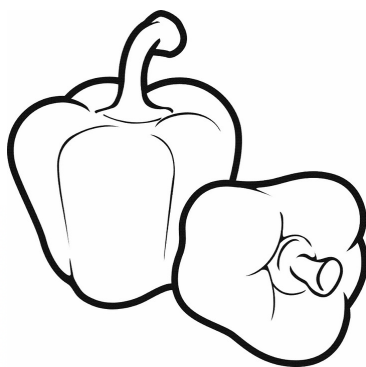
Before you start planting, you must clean up what was left from the Fall and Winter. Not everything gets thrown away, so it is important to know the difference between what's good and what's bad in the garden bed.

- Start with removing dead plants that show signs of infection, you must remove the entire root if plants are not perennials. Also, remove and twigs, these are no good for our garden!
- Plants from last season can be left in the garden or be cut-back! Make sure an adult is present while you use the gardening sheers.
- Good leaves that have fallen from trees can be made into mulch and can also be used for composting. These can be left to the side so microorganisms can break down the plant material over time. Pollinating insects may also live in the stems of remaining plants so be careful when handling them, these insects can help your garden!

Now that our garden bed is clean, we can start prepping our seedlings!



LET'S GET GROWING!



Across

3. Small hand tool for digging
4. Where seedlings are planted indoors
6. Insects that harm plants
8. Plants need this to grow
10. A young plant just starting to grow

Down

1. Essential for plant growth
2. Nutrient-rich material added to soil
5. Part of the plant that grows underground
7. The base where plants grow
9. Unwanted plants in the garden

COLORING ACTIVITY



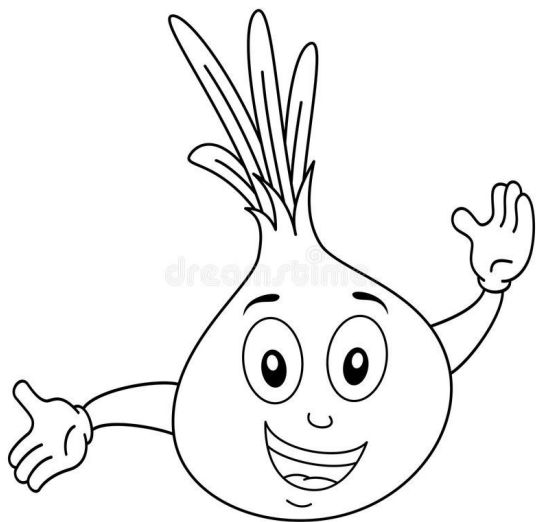
PREPPING SEEDLINGS!

Seedling trays:

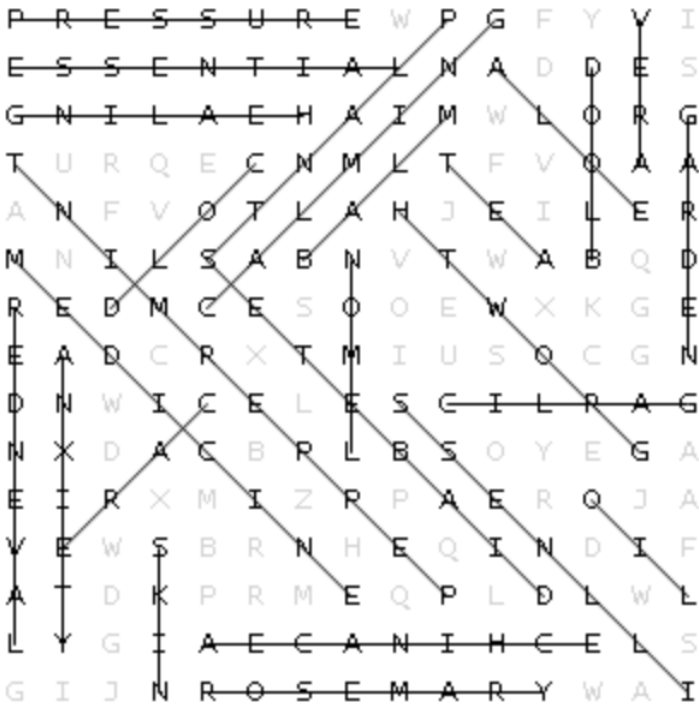
1. Get a seedling tray. This can either be purchased from the store, or you can use an empty egg carton.
2. Add potting soil to each pocket in the tray without over filling.
3. Put a finger in the center to create a hole for the seed.
4. Place one seed in each hole created and cover with soil.
5. Spray the soil with water or use a watering can and use a very small amount to add to the soil.
6. Place the tray in a warm place where it gets plenty of sunlight indoors.
7. Water the seedlings daily and always keep the soil moist.
8. Once the seedlings start to sprout, they are ready for planting outdoors! Make sure to leave them outside in the tray for a day or two so the plants can acclimate to the outdoor weather.



COLORING ACTIVITY



ANSWER KEY
FOOD AS MEDICINE?



NUTRITION BASICS

- 1. immune system function, digestion
- 2. vitamins, minerals, antioxidants
- 3. digestion, gut, inflammation
- 4. flavonoids, polyphenols, diabetes, heart disease, cancer
- 5. immune cells, antibacterial, antiviral
- 6. stress, mental

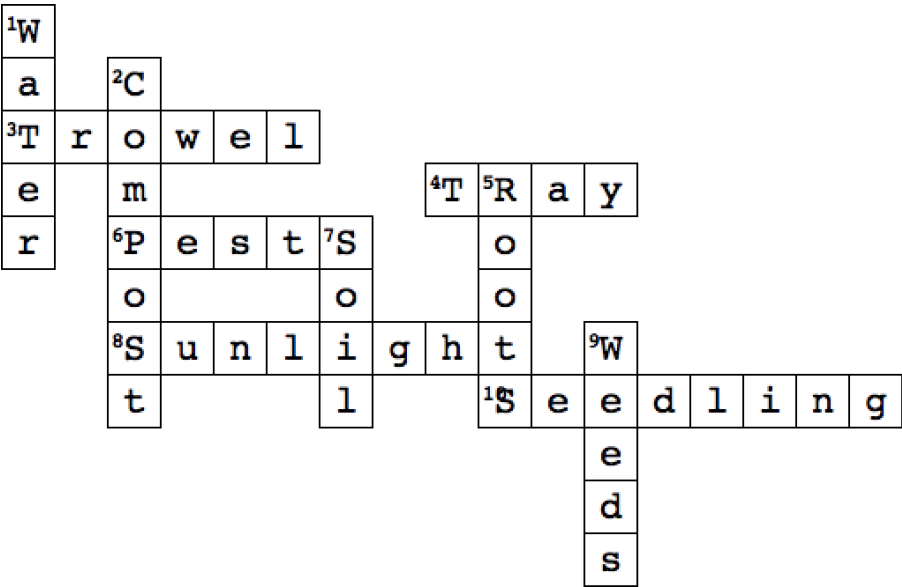
GARDENING TOOLS

- 1. gardening hand tools
- 2. soil preparation tools
- 3. watering tools

MATCH THE TOOL TO ITS FUNCTION

- 1.H
- 2.J
- 3.D
- 4.E
- 5.I
- 6.F
- 7.A
- 8.G
- 9.B
- 10.C

LET’S GET GROWING!



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