

# Learn about Plants and Recycling with these fun projects!

## Recycle Every day Materials into Plant Pots!



#### Materials:

- egg shells
- egg carton (bottom portion with sections)
- soil and seeds
- ice pick

#### How to:

- gently wash the used egg shells
- use ice pick to create a small drainage hole in the bottom of the egg shell
- place egg shells in the carton
- fill egg shells with soil and plant 2-3 seeds in each
- moisten soil with water
- keep your tiny egg pots in a place with good sunlight and air circulation

TIP: When it's time to plant your seedlings, put the whole egg shell in the ground! The egg shell will break down and provide nutrients to the soil.



#### Materials:

- Toilet paper and paper towel rolls
- plastic trays (reuse mushroom, strawberry and tomato boxes)
- soil
- seeds

#### How to:

- Cut tabs around the bottom of the paper roll
- Fold the tabs in so that the bottom of the roll is closed up.
- Fill each roll with soil and place inside plastic tray for stability
- Plant a seed in each roll
- Moisten soil

#### TIPS:

Keep an eye on the paper roll. If the paper roll is dry, then the soil has probably dried out too. Periodically check the bottom of the roll. You will see the roots start to come out. This is great to show students and is probably the time you should consider replanting the seedling into a larger container, or into the ground.



### Self Watering Plant Pot!

#### Materials:

- empty plastic bottle
- newspaper
- string
- soil
- seeds/plant

#### How to:

- cut the bottle in half
- line the top half of the bottle with newspaper or screen
- make a small hole and run several lengths of string through the neck of the bottle (If you leave the cap on you will have to make a hole in the cap for the string to pass through)
- put some water in the bottom part of the bottle
- fill the top part of the bottle with soil and plant a seed!
- Place the top part of the bottle inside the bottom part as shown in the photo.
- Remember to check the bottle periodically and refill the water!

What other creative recycling ideas can you come up with?

## Regrow food from Kitchen Scraps!



**TIP:** Cut the green tips off of scallions (green onions) and save the white part with the roots. Place these leftovers in a cup or jar with a bit of water (to cover the roots). You will notice the green parts of the onion growing back almost over night! Make sure to replace the water every few days.

#### In the classroom:

- \* Measure the growth of your onions with a ruler
- \* Students can create a simple graph to chart the growth of the plant over time.
- \* Place your plants in different conditions (e.g. light and dark) and discuss the requirements of plants and the process of photosynthesis
- \* Experiment by adding fertilizer to the water and see if it affects the growth of the plant.
- \* Encourage your students to start their own container gardens at home!

## Regrow food from Kitchen Scraps!



**TIP:** Cut the celery stalks off a couple inches above the base. Place the base in a shallow dish with water and watch the leaves appear! You will notice growth in a matter of days.



#### In the classroom:

- \* Measure the growth of your celery with a ruler (note that the outer stalks of the celery may shrink, only measure the new growth)
- \* Students can create a simple graph to chart the growth of the plant over time.
- \* Place your celery plants in different conditions (e.g. light and dark) and discuss the requirements of plants
- \* Experiment by adding fertilizer to the water and see if it affects the growth of the celery.

Once you start to see leaves you may plant your celery in soil.
Or keep it in the glass dish as a class display item.

## Use materials from your kitchen to explain science!



#### Materials:

- celery stalk with leaves
- red and blue food colouring
- water
- clear cups or jars

#### How to:

- trim the bottom of the celery (nonleaf part)
- split the celery stalk about three quarters of the way up. The part near the leaves should still be intact.
- Mix food colouring and water in each of the cups. Use a lot of food colouring to make a concentrated solution.
- Place one side of the celery in each of the cups as seen in the photo.
- Leave your project overnight and see what happens!

**TIP:** This is a great way to demonstrate capillary action and to discuss the function of plant parts. For fun, use different colours of food colouring.

Can also be done with lettuce!

