George Kelly School: 7th/8th Grade Tower

Teacher	7th/8th Grade- Ms. Clary
Office Hours By email	By email- dclary@tusd.net Monday - Friday from 8:00 am – 3:30 pm **Emails received outside of these hours will be answered at teacher availability.* ***Do NOT wait until due date to complete assignments!*** CONTACT a FRIEND for assignment HELP too!
By chat or video	Mon. thru Fri. from 3 pm to 3:30 pm **Go to Mrs. Basacker padlet, click on 'Distance Learning' page for ZOOM**
Digital Access to Curriculum	padlet.com/kbasacker

4/24/2020 pick-up materials
5/8/2020 pick-up materials and drop-off Weeks 1 and 2 Assignments
5/15/2020 drop-off Weeks 3 and 4 Assignments

This Curriculum has been developed to support and reinforce the Core- ELA and Social Studies Middle School Standards:

Assignments:

1. Pick two articles, two videos, or a mix to read

   https://learningenglish.voanews.com/p/5610.html

2. Write a summary on each one

Formatting ELA/Social Studies Assignments:

1. Typed/ or written in **INK** must include the following:
   a. Name
   b. Teacher's name
   c. Week# and date range
   d. Articles Summaries – Write a half page summary on your articles or videos
   e. Complete sentences in your summaries

Submitting Required Assignments:

1. Best option: Complete on-line through:
   a. Share through Office 365
   b. Attach document and send through e-mail
   c. Scan OR take a photo of completed assignment and attach to e-mail (written assignments MUST be completed legibly in **INK**)
2. Physical drop-off to school: **Fri. May 8 and Fri. May 15 *Refer to GKE Drop-off Schedule**

Houseplants: Care and Tips

April 01, 2020

FILE: Succulent plants growing in a home in Washington state. These house plants need little maintenance. They can go for a long time without water. June 19, 2013.

Many people enjoy having plants inside their homes, especially when it is cold outside.

But sometimes houseplants need a little help. If they are struggling, houseplants will let you know. They show discolored leaves, and their **stems** droop – or no longer stand strong or tall. And there will be little or no growth.

“Plants send signals simply by the way they look,” said Dawn Pettinelli, an Extension educator at the University of Connecticut. “If they aren’t getting enough light, the leaves will yellow or turn brown and they will be slow to develop.”

Leaves with the wrong colors can also mean other problems. These include root problems, insects hurting the plant, the wrong soil **moisture,** or bad light conditions or temperatures.

One of America's most popular houseplants is the African violet. It has violet, or purple-colored flowers. These plants do not like to be cold, but they also get **stressed** when it is too warm.

Pettinelli said they start to droop when they are cold. And they will not flower if they are hot.

FILE: Workers check African violet plants before shipping in Nashville, TN. Holtkamp Greenhouses Inc. July 18,2007.

Pruning: Plant haircuts

A good way to help renew tired houseplants is by giving them a plant "haircut." In the gardening world, cutting back plants is called "pruning."

Pruning serves many needs. Diana Alfuth is a gardening expert with University of Wisconsin Extension. She said pruning helps with shaping, removing dead matter, and keeping the plants from drooping.

"Pruning then results in strong new growth," she said. It also helps keep a plant bushier—meaning thicker and more round.

Slow-growing or tree-type houseplants do not do well with major cutting back, she said. Avoid pruning plants like palms, pines and orchids.

Pruning is also a way to start new plants. You can take the cuttings from pruning and grow new plants.

Want a houseplant that needs less care than others?

"**Succulents** are great," Alfuth said. They can go without water for long periods of time. They grow slowly, so they rarely need pruning or a new pot.

Be careful not to overwater houseplants, like this lemon tree, growing inside a home near Langley, Washington. Plants lose oxygen when they get too much water, especially the roots, and will drown. Ice cubes melt slowly. (Dean Fosdick)

Houseplants diet

A houseplant's diet is important. So is the timing of when you give them fertilizers—nutrients for growth.

"Houseplants should not be fertilized during winter when days are short," Alfuth said. "Fertilize in late winter as days get longer and plants wake up and will need fertilizer to put on growth during spring."

And do not forget to dust.

"When plants start touching the floor, they start collecting dust," Pettinelli said. "If covered with dust, **photosynthesis** is reduced and the plants start losing some of their chemical energy for growth."

Watering plants too much is a leading cause of losing houseplants. So, be careful not to overwater. "Plants lose oxygen when they get too much water," Pettinelli said. "Especially the roots. They'll drown."

Check to see if your plants' roots are overgrown in the bottom of the pot. That means you should re-pot the plant in a new, larger pot. But be sure the pots have holes cut in the bottoms so that extra water can get out.

I'm Anne Ball.

Dean Fosdick with the Associated Press reported this story. Anne Ball adapted the story for VOA Learning English. Kelly Jean Kelly was the editor.

We want to hear from you. Write to us in the Comments Section.

Words in This Story

stem – *n.* the main long and thin part of a plant that rises above the soil and supports the leaves and flowers

moisture – *n.* a small amount of a liquid like water, that makes something wet or moist

stressed – *adj.* feeling worried or anxious, having a lot of pressure

succulents – *n.* plants with thick, heavy leaves or stems that store water

photosynthesis – *n.* the process by which a green plant turns water and carbon dioxide into food when exposed to light

Scientists Discover New Bacteria that Feeds on Plastic

April 05, 2020

In this Wednesday, Nov. 6, 2019, image, plastic and other garbage floats in a collector of a new device that uses a curtain of tiny air bubbles to catch plastic floating in the capital's canals is seen in Amsterdam, Netherlands.

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Pop-out player

Researchers have identified a new bacterium that feeds on polyurethane, a kind of plastic that is difficult to **recycle** or destroy.

Scientists say the discovery could help reduce a flood of hard-to-recycle plastics that are ending up in the world's landfills and polluting oceans.

A team from the Helmholtz Center for Environmental Research in Leipzig, Germany, found the new **strain** of soil bacteria. It was identified in an area that contained a large amount of plastic waste.

The team discovered the bacteria were feeding on polyurethane diol, a substance widely used in many different products.

The researchers estimated that in 2015, polyurethane made up 3.5 million tons of Europe's plastics.

A statue depicting a plastic-throwing dragon is set up in front of the European Commission, during an action by NGO alliance Rethink Plastic to demand an end of the use of disposable plastic, in Brussels on November 26, 2018. (Photo by AFP)

One problem is that recycling polyurethane requires a lot of energy. The plastic material does not melt when heated. Most polyurethane-based products end up in landfills, where they can release dangerous chemicals.

The team found that the bacterium, identified as Pseudomonas putida, can produce **enzymes** that eat away at polyurethanes. This would make it possible to break down the material in the environment.

The results were recently reported in a study in the publication *Frontiers in Microbiology*.

Hermann Heipieper helped write the report. He said in a statement the finding "represents an important step in being able to reuse hard-to-recycle (polyurethane) products."

Workers load collected plastic bottles on to a truck at a junk shop in Manila, March 10, 2015. (REUTERS/Romeo Ranoco)

The research is part of a European Union program that seeks to find useful microorganisms. The goal is to identify living things that can help turn oil-based plastics into substances that can be broken down biologically.

Similar experiments have been carried out in the past.

In 2011, Yale University students discovered a **fungus** that could feed on polyurethane plastic even in a place without air, like at the bottom of a landfill.

Since then, scientists around the world have identified other kinds of fungi that can break down polyurethane. In 2017, a team of scientists identified a fungus that can feed on plastic by breaking down the main chemicals holding it together.

A recycler drags a huge bag of paper sorted for recycling past a heap of non-recyclable material at Richmond sanitary landfill site on 2 June 2018 in the industrial city of Bulawayo.

The German study noted that plastic-eating bacteria could be easily controlled and produced for industrial use. The researchers said the next step is to identify more information about the bacterial enzymes that can break down polyurethane.

Some scientists advise against introducing man-made enzymes or microorganisms into the environment that could be harmful.

Scientist Douglas Rader wrote about the issue in a 2018 article for the Environmental Defense Fund. He said much more study should be carried out to learn about "the complex relationships between plastics and marine **ecosystems**." Such research is needed "before we can take **drastic** action such as" putting plastic-eating bacteria into the ocean, Rader wrote.

In this photo taken on Tuesday, April 23, 2019, plastic bottles and other garbage float in the river Drina near Visegrad, eastern Bosnia-Herzegovina. (AP Photo/Eldar Emric)

The group Plastic Oceans International reports that scientists estimate more than 8 million tons of plastic are thrown into the world's oceans every year.

An estimated 300 million tons of plastic is produced yearly worldwide. Plastic Oceans International says about half of that amount is created for one use only.

I'm Bryan Lynn.

Bryan Lynn wrote this story for VOA Learning English, based on reports from the Helmholtz Center for Environmental Research, VOA News and Frontiers in Microbiology. Mario Ritter, Jr. was the editor.

We want to hear from you. Write to us in the Comments section, and visit our Facebook page.

Quiz - Scientists Discover New Bacteria that Feeds on Plastic

Start the Quiz to find out

Start Quiz

Words in This Story

recycle –*v.* to reuse something that has been used before often in another way

strain – *n.* a type of disease or plant

enzyme – *n.* a chemical substance produced by living cells that makes particular chemical reactions happen in animals and plants

fungus– *n.* a type of plant without leaves that gets its food from other living or decaying things

ecosystem – *n.* a biological community of interacting organisms and their physical environment

drastic – *adj.* sudden or extreme