

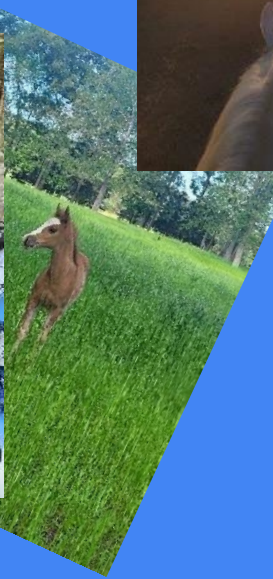
Ag in the Science Classroom

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A Little About Me



CH CENTRAL HEIGHTS
INDEPENDENT SCHOOL DISTRICT



How to Incorporate Ag

- Ag is Life Wall
- T-TESS
- Same Concept-New Resources
 - <https://texasmatrix.agclassroom.org/matrix/>

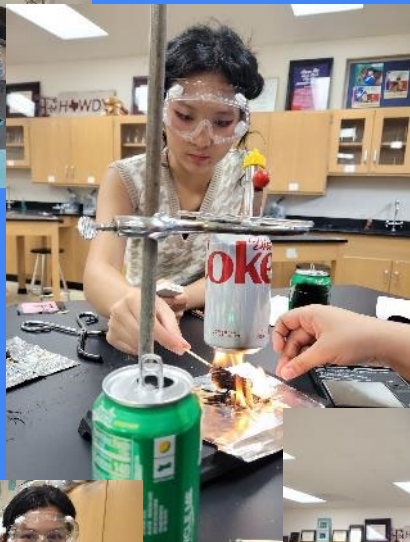


Biology



- Hydroponics Garden
- Milk and Food Coloring
- The World is an Apple
- Souring Milk
- Bacterial Meat
- GMOs
- Bread Making
- Genes and their Environment
- Making a Champion-Equine
- Animal Breeding
- Apple Evolution
- Ag Trophic Levels
- Ranch Starter
- Good Buddies
- Oh Deer
- Living Necklaces
- Bug Hunt
- Nervous System
- Skeletal System
- Watermelon Mitosis and Meiosis
- Strawberry DNA
- Flower Origami
- Bug Hotels
- Beeswax Lip Balm
- Salsa Making
- Mealworm Wall Art

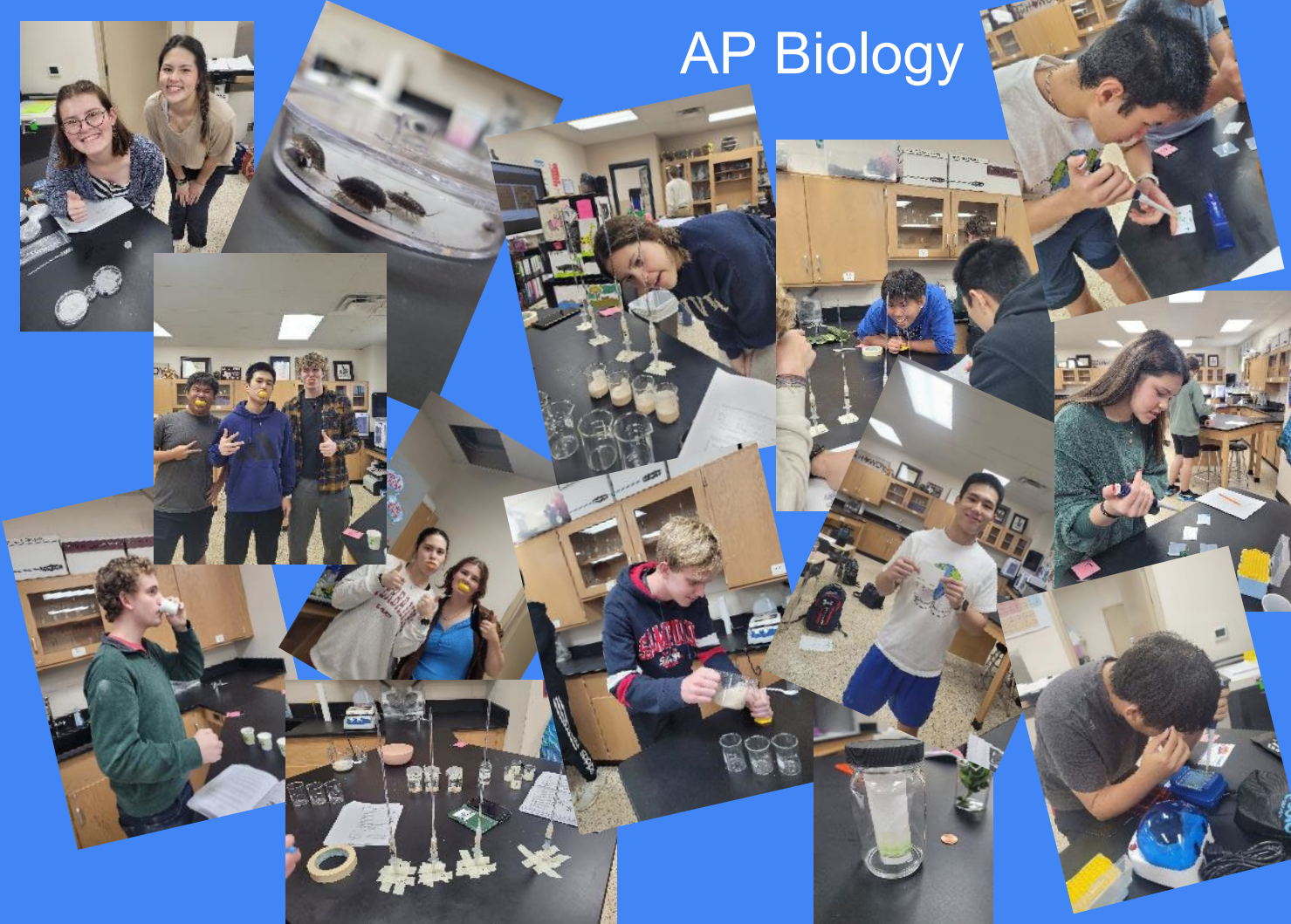
AP Chemistry



- Cheese Making
- Ice Cream
- Food Calorimetry
- Le Chatelier's Principle-Butterfly
- Pea Tea
- Titration-Aspirin
- Popcorn
- Wool Dyeing
- What's in Fertilizer


AP Biology

- Animal behavior
- Honey fermentation
- Potato and onion osmosis
- Who's the sire
- Leaf chromatography
- Cell signaling
- WI fast plants
- Predator-prey
- Termite behavior



Biology

Cellular Processes (Energy)- Cellular Respiration- TEK 11A



Food Science:
Bread Dough Challenge

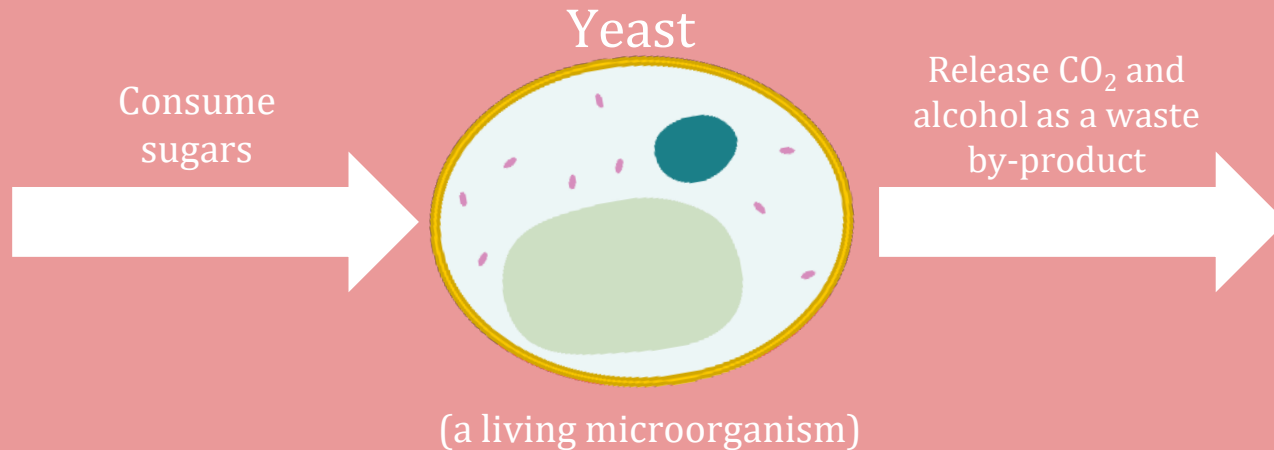
What makes bread dough rise?

- Yeast is one ingredient that can make bread dough rise.
- When sugar is introduced to yeast, the sugars are metabolized and carbon dioxide gas and alcohol are released inside the dough, causing it to rise.



How do yeast cells get energy?

- Alcoholic fermentation
- The biological process that converts sugar into cellular energy.
- It produces alcohol and carbon dioxide as by-products



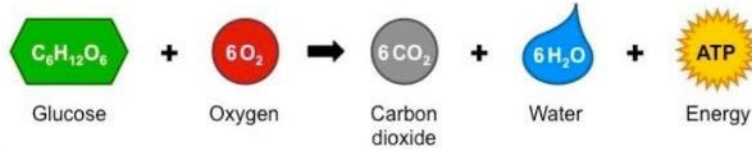
What factors speed or slow the process of dough rising?

- Temperature
- Amount of sugar
- Amount of yeast
- Proportion of water to sugar/yeast



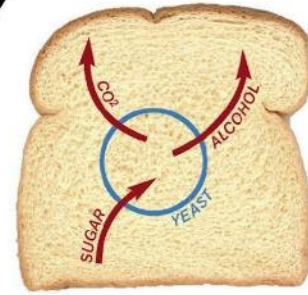


Plants convert energy from the sun through **photosynthesis**.

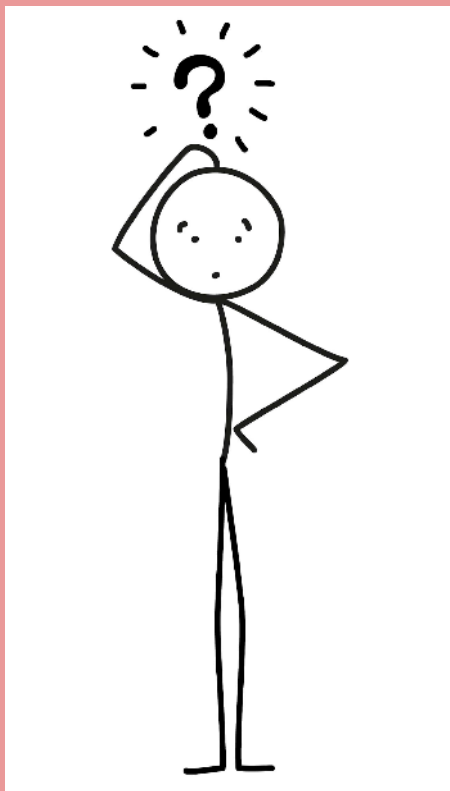


Organisms use oxygen to perform **aerobic cellular respiration**, which creates ATP (energy).

Remember, all living organisms need energy!



Bacteria, archaea, yeast and muscle cells can perform **anaerobic** respiration without oxygen through **fermentation**.



How can I make dough rise the fastest?