



Scientific  
Connections  
*through*  
Inquiry

LEVEL 4

Student Book  
Edition 1

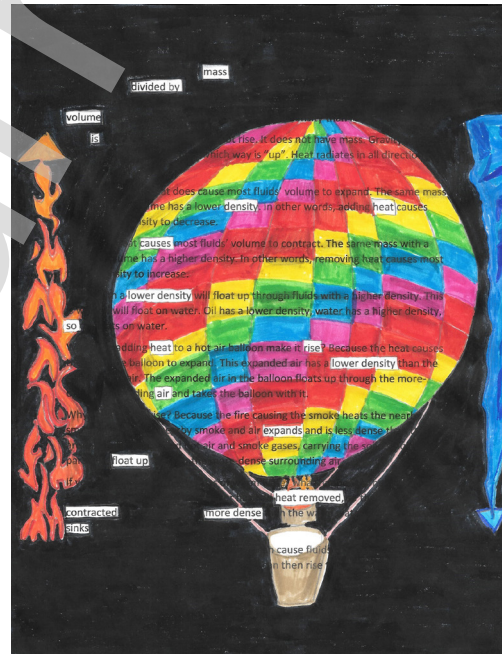


# Heat Blackout Poetry

You will be writing a poem about heat using the text on the next page.

1. Read the text on the next page.
2. Select 10-30 words you would like to make up your poem. Lightly circle or box those words in using a pencil. Avoid circling 5 or more words in a row.
3. Read over your circled words. Do they describe an aspect of heat in a poetic way? If not, reread and find words that help you achieve that goal.
4. Once you're satisfied with your chosen words, draw and color an image related to your poem over the remaining text, but **be very careful not to color over the words you circled or boxed**. When you are done, only the words you selected will be easily readable.

Here are some examples of completed blackout poems:

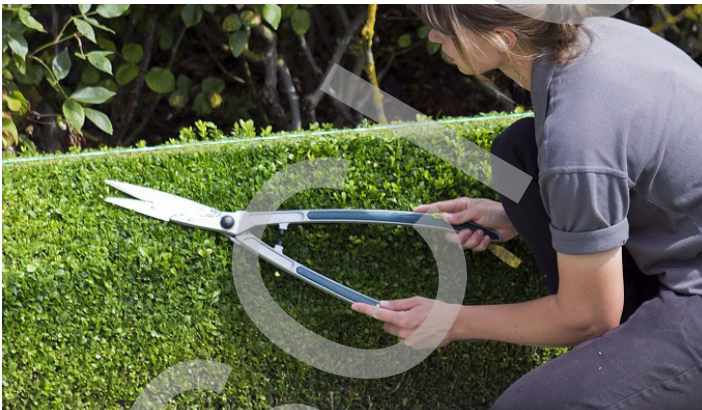
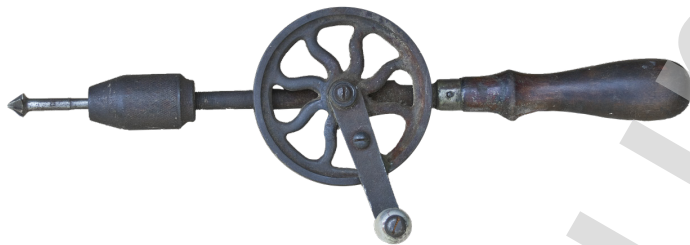


# Simple Machines

Six main types of simple machines are:

- Levers
- Inclined planes
- Screws
- Wedges
- Pulleys
- Wheels and axles

The following compound machines are made up of two or more simple machines. Identify and label simple machines within each compound machine below.



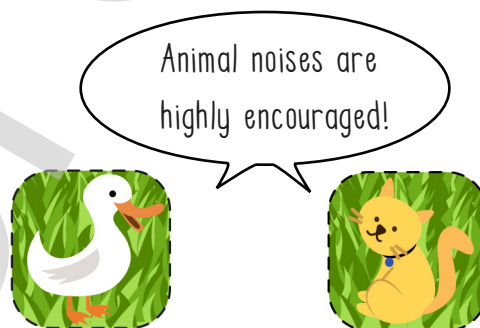
# Over the Fence

In your quest to be the best neighbor ever, you have decided to water your neighbor's vegetables. However, a high fence blocks you from seeing their garden plot. And what's more, your neighbor had the same idea!

Cut out the vegetables and animals and give each player one top grid (with a fence), one bottom grid, and one set of vegetables and animals. If you would like your game to last for multiple plays, laminate the grids and pieces and use dry erase marker to mark guesses. Place the grids inside an open binder or file folder so the top grid stands up, facing the player and the bottom grid is laying flat, below the top grid. You're ready to play!

How to play Over the Fence:

1. Each player places their vegetables and animals in their garden (the bottom grid). Make sure that no plants or animals overlap.
2. The first player to complete placing their vegetables and animals goes first.
3. Player 1 calls out a grid location (e.g., A 3) at which they are spraying water.
4. Player 2 responds with "Miss," or "You watered my \_\_\_!" (cat, carrot, etc.)
  - If the duck is watered, it is delighted—you get an extra turn.
  - If the cat is watered, it is quite grumpy—you lose your next turn.
  - If either the duck or cat is watered, it moves to a new, dry location. It cannot go to a space that has previously been watered nor on any other vegetable or animal.
5. Both players mark the water spray, Player 1 on their top grid, Player 2 on their bottom grid. An "X" marks a miss, an "O" marks a vegetable location. Mark any animals hit as a miss (since they have now moved and only wet dirt is left at that location).
6. Player 2 now calls out a grid location, and Player 1 responds.
7. The first player to water all of their neighbor's plants wins!
8. If Player 1 wins, Player 2 can still take their turn. In this way, each player gets the same number of turns.



# Seedling Growth

Record your seedling growth here. Then graph your results below. Use one color for the length of the top of the plant and another for the length of the roots, but graph both on the same chart. Be sure to identify what the colors mean in the key.

Days since sprouting	Length of top of plant (cm)	Length of roots (cm)

