# Clue-ology

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**Target Grade**: Can be adapted for any grade or subject

**Time Required**: 45 minutes (Can be adjusted)

**Lesson Objectives**

Students will:

- Review, distinguish, and connect terms, concepts, and learning (and have fun!)

**Central Focus**

Clue: an awesome review game. Answer: Clue-ology! This end-of-year review game gives students an opportunity to interact with and review a wide range of concepts and terms that have been explored throughout a term or year. Students will make connections, engage in SEL practices, communicate through original thought with peers, and interpret ideas. This engaging review game will allow students to recall information from the entire course, while being competitive and having fun!

Keywords: memory, active, activity, test

**Materials**

- White and colored paper or cardstock
- Term Card Template
- Clue-give Key Card Template

| Type of card | | Number needed per group of 4-6 students |
|---|---|---|
| Term cards | | 20 |
| Clue-giver key card | | 1 |
| Team A "team acid" Pink blank card | | 7 |
| Team B "team base" Blue blank card | | 7 |
| Neutral cards "neutrals" Green blank card | | 5 |
| Death card "chemical spill" **Black blank card** | | 1 |

**Instruction**

*Preparation*

- Step 1: Generate a long list of vocabulary terms. The more the better. This can be done by the teacher or students. Enter terms into the Term Card template. Each team of 4-6 will need 20 cards each round. Determine how many "decks" of terms are needed. Print double sided and cut out.

- Step 2: Print and cut out the number of clue- giver key cards needed. (Key cards can also be printed blank in black and white and colored with markers- 7 pink boxes, 7 blue boxes, 5 green boxes and 1 black box.)
- Step 3: Each team of 4-6 requires the remaining colored cards (7 pink, 7 blue, 5 green, and 1 black) to be cut out in roughly business card size.

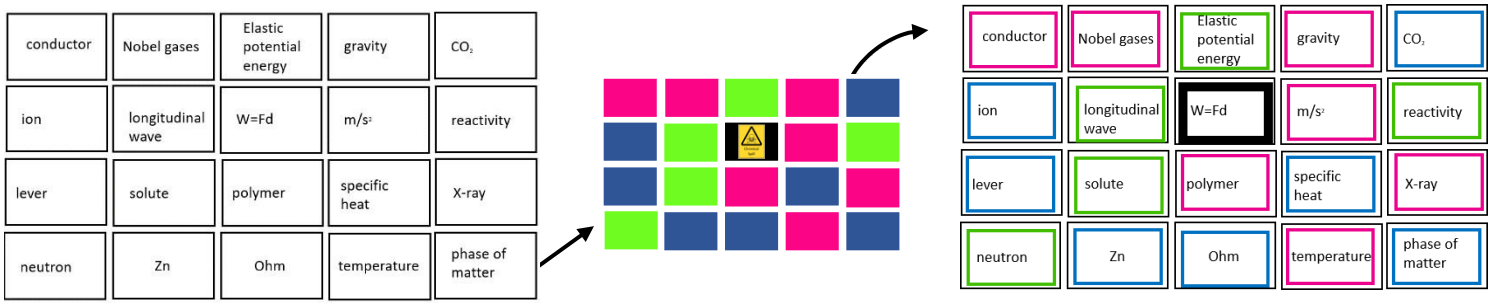
*Tip: Put needed materials in plastic baggies for each group and keep extra term cards in a master deck at your desk where students can trade out for new cards in between rounds. Ideally all groups will have the term cards they need and extra term cards will still be left in the master deck. If there are not enough terms for this, multiple "decks" of term cards can be printed.*

*Setup*

- Players split into two teams (A and B). Team A and B each choose one person to be their clue-giver. Both clue-givers sit on the same side of the table. All other players sit across from the clue-givers and are the guesser/s for their respective team.
- Randomly choose and place 20 white term cards in a 4x5 grid on the table.

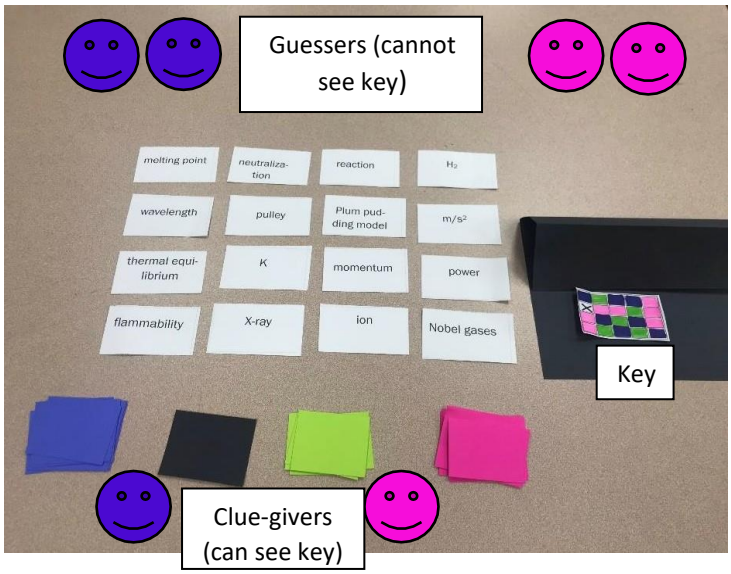
*The Key*

- Each game has one key. The clue-givers will place the key card behind the paper divider so that the guesser/s cannot see it. The clue-giver key card corresponds to the grid on the table. The pink squares correspond to the terms on the table that team A must guess. Blue squares correspond to the terms on the table team B must guess. The green squares are neutral cards and the **black** card is the "death" card.
- Only clue-givers can see the key. The guesser/s will not know which term cards earn points for which team. It will be up to the clue-givers to get their team to guess the right term cards.



- According to the key shown above, Team A's clue-giver is trying to get their guesser to choose term cards that correlate to pink on the key (in this case, conductor, noble gas, gravity, m/s2, polymer, X-ray, and temperature) while Team B's clue-giver wants their guesser/s to choose the term cards that correlate to blue on the key (in this case, CO2, ion, lever, specific heat, Zn, Ohm, and phase of matter). Remember that the guesser/s can only see the term cards on the table and not they key, so the guesser/s must interpret the clues from their clue-giver and try to choose the term card that matches the clue given and earn their team a point. Neither clue-giver wants their guesser/s to choose the **death** card (in this case, W=Fd) because it will result in an automatic loss. If the guesser/s choose cards that correlate to green on the key (in this case, elastic potential energy, longitudinal wave, reactivity, solute, and neutron) no points are earned for either team.

*To Start Play*




- The team who has the person with the next birthday goes first.
- Clue-givers look at the key to determine which term cards they need their guesser/s to choose.
- Clue-givers take turns giving their guesser/s a one sentence clue (the clue cannot contain any of the words on the table). The guesser/s try to figure out which term card the clue-giver is trying to get them to guess.
- The guesser/s can discuss their choice or think aloud, but indicate their final answer by touching the term card. If they are correct, the clue-giver covers the term card with their team's blank color card. If they guess wrong, the term card is covered with the other team's blank color card, a blank neutral green card or the black "death" card according to the key. Then it's the other team's turn to give a clue and guess.
- The first team to guess and place all 7 of their cards wins the round. Neutral cards do not earn points for either team but do end the turn if guessed. The death card means game over and an automatic loss if guessed.
- To set up another round, the term cards can be flipped over (if printed double sided) or replaced with entirely new term cards from the master deck and a new key must be used.

**Example game (according to the key card above):** Team A starts. Team A's clue-giver says to the Team A guesser/s, "isn't likely to form bonds with other elements", hoping the guesser will choose "noble gas". Team A guesser/s think aloud and then make their final choice by touching the "noble gas" term card. This is a point for Team A. The clue-giver then places a pink blank card over the "noble gas" term card, covering it up and indicating that Team A has 1 point.

Team B's clue-giver now gives the clue "it's a particle" (hoping their team chooses the term card "ion"). The Team B guesser/s choose "$CO_2$". Though this is not the card Team B's clue-giver had intended, it is still one of Team B's term cards according to the key, so the clue-giver will cover the term card "$CO_2$" with a blue blank card indicating one point for Team B. Team A's clue-giver now gives the clue "it's a property of matter" (hoping their guesser/s choose the term card "conductor"), but the guesser/s choose "specific heat" instead, which is a blue, Team B term card according to the key. The clue-giver must place a blue blank card over the term "specific heat" indicating a point for Team B, even though it was the Team A guesser/s who chose it. Now it is Team B's turn again. The clue-giver says, "solid is an example of this" (hoping the guesser/s will choose "state of matter") but the guesser/s choose "solute", which is a neutral green card. The clue-givers cover the card with a green blank card indicating that neither team earns a point. Team A's clue-giver says, "force" (hoping their guesser/s will choose the term card "gravity"), but the guesser/s choose the term card "W=fd". According to the key in this round the "W-fd" term card is the death card and regardless of points so far, Team B wins the round.

**Differentiation**

- Clue-givers can give a one sentence clue. Example: "It's a type of simple machine" to get their team to guess the term "pulley".
- Clue-givers can only give a one word clue. Example: "fire" to get their team to guess the term "flammability".
- Clue-givers can only give a one word clue (or one sentence clue) and can indicate how many terms that clue is associated with. Example: "molecules, 2 terms" to get their team to guess "$H_2$" and" $CO_2$". If playing this way, the guesser/s can guess one term at a time. If the guesser/s choose the other team's card or a neutral card, their turn is automatically over.

# Instructions for creating clue-giver key cards:

If printing in color:

- Fill boxes with color (example on slide 2)
- Print 6 slides to a page
- Cut out

If printing in black & white:

- Leave boxes white and print 6 slides to a page
- Color boxes with markers
- Cut out

**Remember: All clue-giver key cards must have 7 pink, 7 blue, 5 green and **1 black****

Chemical
Spill

| | |
|---|---|
| term | term |
| term | term |
| term | term |
| term | term |
| term | term |