

Purpose & SOL

- The students will identify compounds and elements by completing a sort.
- Science 5.4c, 5.4d

Materials

- Header cards (see attached)
- Cards to sort (make one set for each group)

Length
20 min.

Introduction

Discuss the difference between an element and a compound. Elements make up all matter and over 100 can be found on the periodic table. When two or more elements combine to form a new substance, it's called a compound.

Have students name a few elements, and do 4 high knees after each.

Have students name a few compounds and do 4 cross crawls.

Explain that doing high knees only uses one part of your body, like an element is only one from the periodic table. But a cross crawl uses at least 2 parts of your body, like a compound is two or more elements.

Implementation

Sort

- 1) Divide the students into groups, no more than 4 students per group.
- 2) Give each group a set of cards to sort and the header cards. Demonstrate how the groups will be making a T-chart with the header cards at the top. Assign an exercise for each of the header cards.
- 3) One at a time, a student from each group will take a turn picking a card. They will read the card and it to their group. As a group, they will decide if it is an element or a compound.
- 4) The card will be sorted under the correct header, and the appropriate exercise will be completed as a group (4 high knees for elements, or 4 cross crawls for compounds).
- 5) Continue until all of the picture cards are sorted.

Cool Down

Review the sort while stretching. Do warrior I pose for elements and warrior 2 pose for compounds.

Modifications

If time remains, have the groups match the symbols with the element or compound (i.e., match O with Oxygen, match NaCl with Sodium Chloride).

This activity can also be played as a relay.



Elements

(4 high knees)

Compounds

(4 cross crawls)

C	H	O
He	Na	K
Carbon	Hydrogen	Oxygen
Helium	Sodium	Potassium

H_2O	NaCl	CO_2
CO	HCl	H_2O_2
Water	Sodium Chloride (table salt)	Carbon Dioxide
Carbon Monoxide	Hydrochloric Acid	Hydrogen Peroxide