Fire & Life Safety Education

Title: Break The Shape of Fire

Subject: Second Grade Lesson Plan on the Fire Triangle

Section: Grade 2-1

Reference: Essentials of Firefighting 4th edition, North Carolina Common Core State Standard for English Language Arts for Grade 2, North Carolina Essential Standards for Grade 2

Learning Environment: Cognitive & Psychomotor

Time: 20 minutes

Materials: One Ziploc bag per student consisting of 3 Popsicle sticks (one labeled HEAT, one labeled FIRE, one labeled OXYGEN) and a triangle piece of card stock that fits perfectly inside the three popsicle sticks labeled FIRE TRIANGLE. Handouts and stickers that correspond with the Fire TRIANGLE message.

North Carolina Common Core State Standards

NCSS L.2.5. a: Identify real-life connections between words and their uses.

NCSS SL. 2.1: Participate in collaborative conversation with diverse partners about topics with peers and adults in small and large groups.

NCSS SL. 2.2: Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

NCSS SL. 2.3: Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information or deepen understanding of a topic or issue.

NCSS R.2.3: Describe the connection between a series of historical events, scientific ideas or concepts or steps in technical procedures in a text.

NCSS R. 2.7: Explain how specific images (e.g. a diagram of how a machine works) contribute to and clarify a text.

NC Essential Standard: Mental and Emotional Health (MEH)— 2.MEH.1.2: Summarize behaviors that help to avoid risks

Terminal Objective:

After participating in five to ten minute presentations, each second grade student shall identify behaviors that help prevent and respond to unintentional fire and burn injury by oral and physical responses with 100 percent accuracy.

Enabling Objectives:

- 1. After participating in a five to ten minute presentation, each second grade student shall identify the three components of the fire triangle and how the components interact with each other.
- 2. While participating in a five-minute presentation led by a facilitator, each second grade student shall explain how removing one or more of the elements will prevent or extinguish a fire and BREAK the shape of fire.

Content

Pass out Ziploc bags of Popsicle sticks – 1 bag per student or they can work in pairs, if necessary.

- 1. Give a BRIEF Introduction and state the reason for the visit.
- 2. Our fire safety topic today is "BREAK The Shape of Fire!"
- 3. Begin with a few questions...
- 1) "How many of you know how to Stop, Drop and Roll?" (Wait for some answers.)
- 2) "Who knows WHY you should Stop, Drop and Roll if your clothes catch on fire?"

(Wait for some answers. If answers are incorrect correct the students in a POSITIVE way.)

If the correct answer is not given to question 2...

We Stop, Drop, and Roll when our clothes catch on fire to take the oxygen out of the fire.

4. Then...

In this lesson we are going to learn about the Fire Triangle – the three things a fire needs to start and burn. Fire needs:

FUEL: Something to burn; wood, clothing, paper

OXYGEN: The air for the fire to "breathe" or grow

HEAT: Something hot or already burning such as a candle, a match or a flame

There are 3 ways to keep a fire from starting or to stop a fire after it has begun:

1) Take away the OXYGEN: such as when we Stop, Drop, & Roll.

- 2) Cool the HEAT: as firefighters do when they pour water or spray foam on a fire.
- 3) Remove the FUEL: During a forest fire, firefighters have to sometimes cut down trees in front of the fire so it will have nothing left to burn

Each time we remove 1 side of the fire triangle, we BREAK the shape of fire!

Application

Now let's see what you have learned. Open your bags and make a triangle using the 3 Popsicle sticks. In this activity I am going to call out some actions, if you know what part of the Fire Triangle to take away, take it away using one of the three sticks, and then raise your hand and I will call on you.

Tell me if you:

- 1) Took away the oxygen
- 2) Took away the heat
- 3) Took away the fuel

*** If time is running short; choose a few! ***

For little ones you may need to TELL them the answers and let them remove that part of the Fire Triangle.

- * Your clothes catch fire and you to Stop, Drop, and Roll (Took away the oxygen)
- * At the end of camp you put water on a camp fire (Took away the heat)
- * You move a basket of toys away from your space heater (Took the fuel)
- * Mom has a candle lit in the bathroom very close to the curtains. You notice and ask her to move it to the center of the cabinet away from anything that can burn (Took away the heat)
- * While walking through the den you notice newspapers and magazines stacked up right beside the lit fireplace. You move the stack to the other side of the room. (Took away the fuel)
- * Your parent runs water over a lit match after lighting birthday candles on a cake. (Took away the heat)
- * You place a glass jar over a lit candle. (Took away the oxygen)

- * You come home from school and throw your jacket across the room. It lands on the lamp beside your bed that you just turned on. You quickly remove it and put the jacket on your bed. (Took away the fuel)
- * Your mom has a pan of chicken on the stove and the grease catches on fire. Very quickly Mom slides the lid of the pan over the fire and the fire goes out. (Took away the oxygen)
- * Firefighters spray water on a fire (Took away the heat)

Ask: Are there any questions about the activity we just did?

Let the children know to replace the items in their Ziploc bag and what to do with the bag once they are finished.

Summary (Closure)

Thank you for being a great group! Stay safe and remember to go over this information with your family so they can help you... "BREAK the shape of fire!"