

Lesson Plan Fire Triangle

SOLs:

Math 4.12a, 4.12b, Science 4.1b, Reading 4.5h

Learning Objective:

The student will identify all three (parts) elements of the fire triangle.

Descriptive Statement:

The student will learn about and draw the Fire Triangle. Discuss the cause and effect of removing one or more parts of the fire triangle, then present the student with different examples and ask them to make a hypothesis statement.

Ex: “*If* I let all the wood in my fireplace burn, *then* the fire goes out because all the fuel is used up.”

Background Information:

The student will have had previous lessons dealing with fire and what it needs to start and grow.

Materials:

- Handout of a triangle so that students can identify all parts
- Worksheet for “Extinguishing the Match”

Procedure:

Students will be shown the diagram of the Fire Triangle, which they will then add the needed elements: **HEAT, OXYGEN, and FUEL**. The students will then discuss/explain some examples of each element. This will then lead them to the next activity sheet, “Extinguishing the Match”. In this exercise the students will discuss and explain which side of the Fire Triangle is removed in each picture.

Extension Activities:

Discuss the Fire Tetrahedron and how it differs slightly from the Fire Triangle.

http://www.vafire.com/fire_safety_education/Curriculum/K-2%20LessonPlan01.pdf

http://www.scfiremarshal.llronline.com/SCFIRS/FREDDIE/4_5th/C1.pdf

Fire Triangle Word Search Take Home Activity Sheet

Lesson Plan Dangers of Fire

SOLs:

Reading 4.5f, Reading 4.5g, Reading 4.5i

Learning Objective:

The student will identify the dangers of smoke, heat and fire.

The student will discuss the dangers of playing with fire, the extreme temperatures of fire and smoke. Show the thermometer with the extreme temps during a fire.

Background Information:

The student will have previously been introduced to the concept of heat and hot air rises, so they can now make the connection that if they are in smoke, it is best to crawl low under the smoke and its heat. Students will be reminded that smoke contains poisonous gases, such as carbon monoxide, so they must get out quickly in order to avoid breathing it in.

Materials:

- Worksheet “The Temperatures of Fire”

Procedure:

First ask students to identify the boiling point of water, as well as freezing point. Then begin to discuss the other temperatures, relating them to something they are familiar with, such as oven temperature to bake a cake or cook a pizza.

Extension Activities:

Have students compare the “Temperatures of Fire” to the worksheet with information on “Scalds”. Students can also convert the temperatures from Fahrenheit to Celsius.

“Amazing Fire Math” worksheet

Early American Firefighting Reading Selections

Lesson Plan

Home Escape

SOLs:

Reading 4.1b, Reading 4.1d, Reading 4.6c, Oral Language 4.2a, Oral Language 4.2c, Math 4.14

Learning Objective:

The student will learn the actions needed in creating and practicing a successful home escape plan, as well as know the procedures for evacuation while at school.

Descriptive Statement:

The student will learn and then evaluate then compare and contrast the differences and similarities between a home fire escape plan and a school fire escape plan

Procedure:

Have the student draw a diagram (floor plan) of their home, label each room then identify 2 ways out of each room. Discuss and practice the escape procedure with all family members, reminding them to keep doors closed when sleeping and exiting a room in the case of a fire (go back to what a closed door prevents a fire from receiving. Check for and label the location of all smoke alarms in the home, maintenance (keeping clean, adults changing batteries) and testing alarms monthly. The student should recognize the sound of their home's smoke alarm and know what to do once it sounds. Drawn escape plan should include a safe meeting place for family members once out of the home.

For school fire drill, have the students draw a floor plan of their classroom, marking the way out of the class and building. They should also write down rules their teacher has in place during the drill.

Materials:

- Grid paper or plain paper for student to draw diagram of classroom/school, and a diagram of their home
- Venn Diagram to compare and contrast between school fire escape and home fire escape plan

Extension Activities:

Have the class gather data from each of their homes, and create a graph to include:

Number of smoke alarms in their homes

Families that tested their alarms

Number of new batteries installed

Families who created and practiced their home fire escape plans

Distribute Activity Worksheet “Staying Safe”, which will give the students visuals. Have the students discuss:

- 1) What is happening in each picture
- 2) The problem each picture presents to someone trying to be safe
- 3) The steps needed to solve the problem and stay safe

Activity Worksheet “The Mystery of the Missing Smoke Alarms” for reading comprehension. Have the students discuss the importance of smoke alarms

Take home Fact/Tip Sheets:

“Your Home Fire Escape Plan”

“Plan Your Home Fire Escape”

Lesson Plan

Calling 9-1-1

SOLs:

Oral Language 4.2c

Learning Objective:

The student will understand the proper procedure when calling 9-1-1.

Descriptive Statement:

The student will learn proper use of the 9-1-1 system in their community. They will understand what constitutes an emergency, as well gain an understanding as to why he or she should never abuse the system.

Background Information:

The student will have had previous lessons on the phone number used to get help, report a fire, injury or crime.

Materials:

- **Calling 9-1-1 Information Sheet**

Procedure:

Discuss the 9-1-1 Information Sheet and how to make an emergency call:

1. Learn to recognize emergency situations. An emergency is any situation that requires immediate response and is life threatening. An emergency is not;
 - When your pet is sick
 - When you are bored and just want to talk with someone
 - Why you want to get information –like a phone number or address
 - Playing on the phone to check and see if 9-1-1 works
 - Making prank calls/false alarms
2. Learn the consequences of making a prank 9-1-1 call;
 - Prank 9-1-1 calls waste time and money by sending police and/or fire personnel where they are not needed, but can also prevent someone else with a true

emergency from reaching a dispatcher. Police or a Sheriff's Deputy is sent out to check all 9-1-1 hang-ups.

3. Be calm when the dispatcher answers. Speak loud and clear. Give the dispatcher all of the information needed, what type of help is needed, and what your name and address is. Most importantly, stay on the phone until the dispatcher tells you it is okay to hang up.
 - "False Alarms" Worksheet: Have the students read the article out loud and the answer the questions. Be certain to discuss answers and prove which paragraph has the answer.

Assessment Activity: "Is this an emergency"?

Procedure: Explain to the students that they will be given scenarios, and with the new information learned, they must explain if these are true emergencies that require 9-1-1 to be called or not.

- **You are at home with your mother and she falls and hurts herself. You talk to her, but her eyes are closed and she can't speak. Is this an emergency? (YES, because medical help is needed immediately)**
- **Your cat climbs up a tree and won't come down. Is this an emergency? (NO, 9-1-1 is for people. Call your parent or relative to help you)**
- **You look out the window and see flames coming from the roof of your friend's house across the street. Is this an emergency? (YES, because a fire can endanger lives and property)**
- **You are home from school but your parents are not. While watching TV, you hear someone trying to break in the back door. Is this an emergency? (YES, a crime is in progress)**
- **Your dog gets into a fight with another dog and your dog gets hurt. Is this an emergency? (NO, 9-1-1 is for people. Call your parent or relative for help)**
- **You are walking home from your friend's house and a stranger drives up and tells you he will drive you home. You run to your house and lock the door. Is this an emergency? (YES, because you are reporting a crime. Also be certain to tell your parents.)**

- **Your friend is crossing the street to play at your house. A car is speeding down the road and it hits your friend. Is this an emergency? (*YES, medical help is needed*)**

- **You smell smoke in your house. No one is home. Is this an emergency? (*YES, the house might be on fire...leave the house first then call 9-1-1*)**

Extension Activity:

“How to Report Fires & Emergencies” worksheet

Take home “Plan your escape” and “Practice your home fire drill”

CALLING 9-1-1



City of Newport News

Reasons to call 9-1-1:

- To help someone who is hurt or sick and needs help
- If you smell smoke or see a fire
- If you see someone stealing something
- If you see someone hurting another person
- If you see a vehicle accident
- If you need emergency help fast for any reason

How to make an Emergency Call to 9-1-1:

- Stay calm. Take a deep breath to relax. Don't get excited.
- Tell the dispatcher the exact address where the emergency is.
- Give the dispatcher the phone number and full address (including apartment number if an apartment) where you are calling from.
- Say your name, and clearly and calmly tell the dispatcher what the emergency is.
- Answer the questions the dispatcher asks you so the medics, police officers or firefighters can help you quickly.
- **DO NOT HANG UP** until the dispatcher tells you it's okay to hang up.

NEVER call 9-1-1 to ask a question or to play a joke.

- If you need information but **DO NOT** have an emergency, call
 - ✓ Fire Department/Police Department
 - ✓ Non-Emergency: 247-2500

Lesson Plan

Home Fire Hazards

SOLs:

Reading 4.4 e, Reading 4.5 g, Science 4.3 c, 4.3 d, Oral Language 4.1 b, 4.1 c

Learning Objectives:

The student will also learn to inspect for and identify various home fire hazards.

Descriptive Statement:

The student will learn to inspect and identify various home fire hazards, and also discuss ways to correct a variety of home fire hazards thereby creating a safer home environment. This will cause the student to make alertness or home fire hazards a part of his/her daily living.

Background Information:

The student will have a basic understanding of fire through previous lessons on the fire triangle.

Materials:

Common Fire Hazards Worksheet

“Is Your Family Safe” Fill in the blank worksheet

Procedure:

Have the students discuss:

- 1) How each item listed can become a fire hazard
- 2) How each fire hazard listed can be made safe

Extension Activity:

As a SmartBoard Activity: Go to: <http://www.hazardhouse.com/newportnews> for the “Hazard House” (USFA). Have different students navigate through the house, identify a hazard and tell what makes it a hazard, as well as how it can be corrected.

Home Inspection Checklist- For students to take home and go over/fill out with their parents

Common Fire Hazards

1) How can this item become a fire hazard?

2) How can this fire hazard be made safe?

- Stoves (electric, gas)
- Microwave oven
- Exterior Cooking Equipment (BBQ grills, fire pit)
- Coffee maker, Toaster, Iron, Space Heater, Curling/Flat Iron
- Candles
- Electrical Extension Cords
- Extension cords under carpets
- Flammable Liquids (gasoline, propane)
- Clutter
- Cigarettes
- Fireplace
- Matches and Lighters