Man and nature - a complex relationship

Section 1: Hunters and Gatherers

About the lesson

Subjects: History (2 hours), Nature Science (2 hours)

Estimated time frame: 4 hours

Description: In this course,, we will examine the relationship between man and and nature by focusing on early human history. We will learn about key discoveries, that helped securing the position of humans as a dominant species on earth.

Learning goals:

1. Understanding why humans became the most advanced and dominating mammals in nature
2. Understanding how early humans interacted with their environment and the impact they had
3. Understanding how the discovery of certain technologies became a game changer
4. Investigating and understanding the use of fire as a tool
5. Understanding which natural forces are at play to sustain or control fire

Needed materials: Projector and PC, sound, access to a fireplace, firewood and some food to prepare over fire. Water and sand for extinguishing.

Age group: Grade 4 - 6.

Early human history

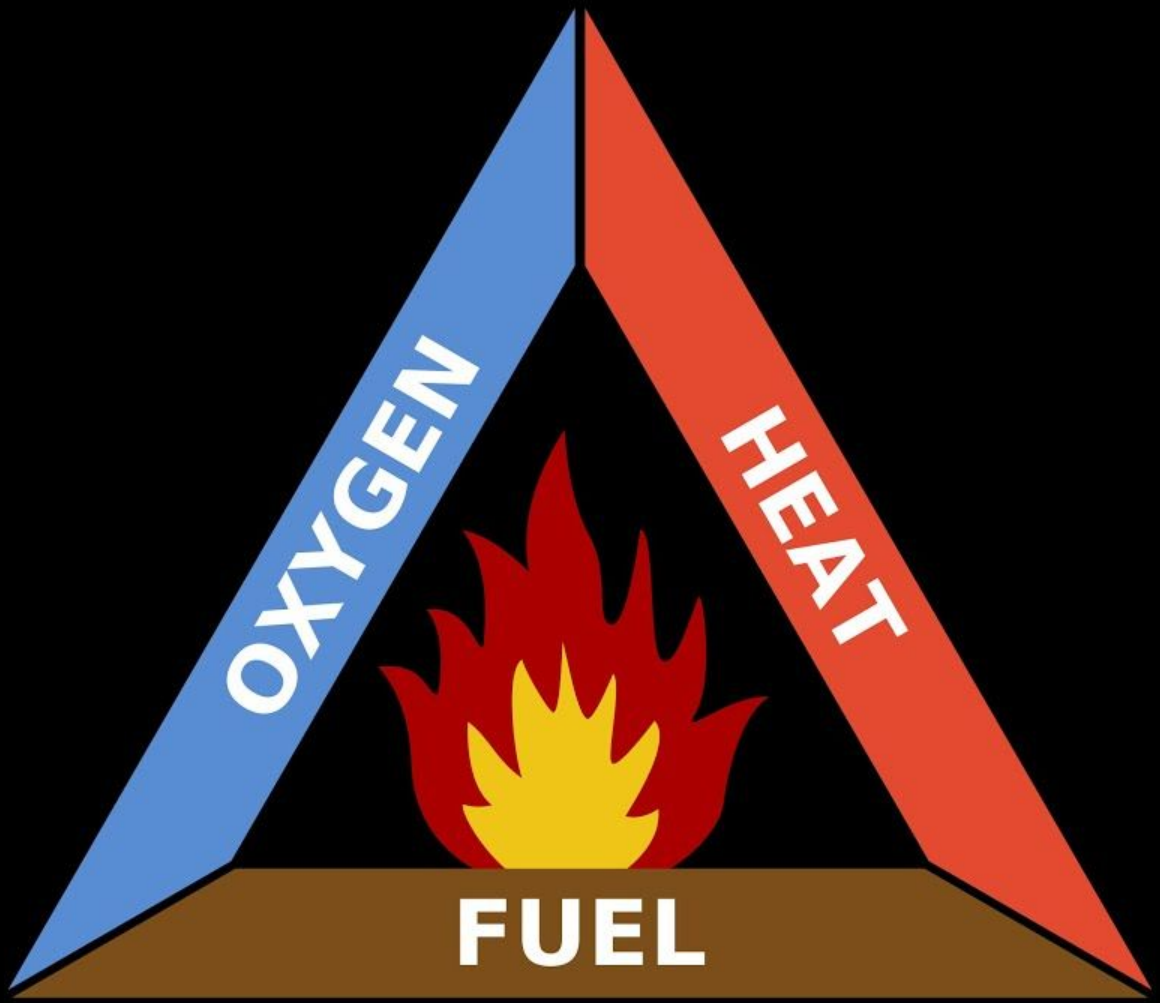
1. Watch the following animated video from ‘Kurzgesagt’ about early human history https://www.youtube.com/watch?v=dGiQaabX3_o (10 minutes)
2. Contemplate individually or by brainstorming in groups the following questions (30 minutes)
    a. When did the paleolithic period conclude?
    b. What could a typical hunter-gatherer diet look like?
    c. Did this way of living offer any advantages?
    d. What were some key inventions/discoveries during this period?
    e. Why did these inventions make an impact?
    f. How did humans protect themselves from natural elements?
    g. In which ways could this way of living affect the environment?

The discovery of fire

1. Watch the movie about the discovery of fire. https://www.youtube.com/watch?v=zfqf5iyY2YY (3 minutes)
2. Contemplate the following questions individually or in groups (20 - 30 minutes)
    a. When was fire first used as a tool by humans?
    b. How was fire used as a tool?
    c. What were the possible advantages/gains from using this tool
    d. What were potential disadvantages/challenges?
    e. How could fire be used to manipulate the environment?
    f. What was the purpose of using fire in this way?

Fire - a versatile and potentially dangerous tool

1. Look at the illustration of the fire triangle on the following slide (5 minutes)
2. Contemplate the following (20 minutes)
   a. Which elements are needed to sustain a fire?
   b. What would happen, if we removed any of the elements?
   c. How could we test this?
   d. Do we know of any real-world applications of these principles? Like why do firefighters often use water to extinguish fires? Which of the elements is being affected by this?
   e. How about a fire extinguisher with foam? What happens?
   f. Do we know of any real-world examples, where we remove fuel from the fire to extinguish it?
3. Go to a fireplace (1½ hour)
4. Go through the safety protocol with your students
5. Let the students try and get a fire started
6. Enjoy some food cooked over the fire
7. Finish of by letting the students demonstrate different methods of putting out the fire, when you are done


OXYGEN
HEAT
FUEL

Safety Protocol around the campfire

1. No running around the fireplace
2. No tumbling or fighting near the fire
3. Do not take any actions before confirming with your teacher
4. Follow the instructions given by your teacher at all times
5. Always have water and sand ready