

Why Does Water Boil?

Focus Lesson: Understanding boiling water

Materials:

Strega Nona by Tomie dePaola
 Exit ticket sheets
 Websites
 Water heater
 Water

Grade: 3

Time: 35 minutes

Pairs with lesson plan: Recipe Reading: Pasta and Boiling Water

***Common Core Standards:**

CCSS.ELA-LITERACY.SL.3.1.C

Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.

CCSS.ELA-LITERACY.RL.3.2

Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.

CCSS.ELA-LITERACY.RL.3.3

Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events

Thinking Skill:

Recounting a story

Objective:

Students will understand that pasta is cooked in boiling water.
 Students will understand why water boils and what happens as it boils.
 Students will recount events from the story.

Connection:

Pasta is a popular dinner option for many people. Cooking the pasta itself only involves one thing-boiling water and putting the pasta in the water! Does anyone know what water looks like when it boils?

Today we are going to read a story called *Strega Nona*. In the story, the woman called Strega Nona cooks lots of pasta using a magic pasta pot. After reading the first half of the story we are going to talk about cooking pasta!

Explicit Instruction:

Read *Strega Nona* by Tommie de Paola up to the page where Big Anthony has just started cooking the pasta (no page numbers in book).

We will find out what happens to Big Anthony and the pasta tomorrow when we read the rest of this book. Right now we are going to talk about pasta and how we go about cooking it.

Read the nutritional facts on pasta from the “I love pasta” website provided below. Help students understand pasta’s nutritional value.

As we talked about before, in order to cook pasta we need to boil some water.

Show the page from “Boiling” website provided below. Explain that boiling water helps cook the pasta and makes it soft and edible, changing from its solid, hard state to a soft state so that we can eat it.

Guided Practice:

We are going to watch what happens when we boil water. We will heat up the water in this water heater, which will act quickly. We will know that the water is boiling when we hear it start to bubble, and see bubbles and steam rising into the air.

Make sure students are seated a comfortable, safe distance away from the water heater and can see the water (show under ELMO if possible).

Explain the process to students as the water starts to boil, and make it very clear that it is hot and they need to stay back.

Allow students to watch the water boil. Have someone “clock” how long it takes.

Independent Practice:

Your Exit Ticket for today is a short worksheet for you to complete on the first half of the story we read today. You will answer the questions about the story and tomorrow we will refresh our memories of what happened by reading them over. This will help us read the second half of the book tomorrow by remembering where we left off.

Distribute Exit Ticket sheets with three questions.

Reading list:

<http://www.ilovepasta.org/public/fun-facts>

<https://www.chem.purdue.edu/gchelp/liquids/boil.html>

Strega Nona by Tomie dePaola

Teacher Note:

Name _____

Part I:

Who is Strega Nona?

Who is Big Anthony and what is his job?

What does Strega Nona cook in her pot?

What does Strega Nona tell Big Anthony NOT to touch?

Part II:

Describe what you observed when the water boiled.

Draw a picture.

What temperature does the water need to be boiling?

What did you see rising from the pot of boiling water?

Bonus: What are all those bubbles in the boiling water?