## Single Effect (Elements of Destruction) Practice Activities

#### **Flash Floods**

A sunny afternoon quickly melts a blanket of snow high in the mountains, creating cascading streams. Storm clouds open up and dump an intense torrent of rain during a thunderstorm, overflowing creek beds. A strained levee, holding back the ocean waves, gives way in the middle of the night. A dam of ice cracks, allowing river water to rush out of control.

Conditions that bring about a sudden rise of water may result in a devastating flash flood. With little warning, flash floods can spill over the banks of rivers and creeks, and send a careening wall of debris – filled water into low – lying communities.

# First, think about what you already know about flash floods. After you finish thinking, please read the passage, "Flash Flood."

#### Next, based on the passage, write a list of the multiple causes of a flash flood.

Finally, create a graphic organizer that helps you visualize how multiple causes create a flash flood. This will help you remember the author's main points as you read.

Compare your answers with Reed's Think Aloud.

**Cause and Effect Relationship** is a technique an author uses to describe how an event happens, and the results of that event.

#### Cause

• The things that occur to create an event

### Effect

• The results of an event

Signal Words are certain words authors use to highlight the cause and effect.

- Signal words to show a cause:
- Because, if, since

### Signal words to show an effect:

• As a result of, consequently, then, thus, so

**Graphic Organizer** - A diagram that helps you visualize something being described verbally or written.

• In this video, the graphic organizer helps show all the things that cause a flood (an event) to happen, which then results in an effect.

#### Razzle Dazzle Science: How Fireworks Work

Evening falls on the fourth of July. Everyone looks to the sky for the first bang, burst and beauty of a fireworks display. With a lighting of a fuse, the combination of metals, oxygen and human innovation create a breathtaking show.

Metal particles give fireworks their vibrant colors. Calcium produces orange, while sodium produces yellow. Red is created by strontium and lithium. Mixed with gunpowder and a fuel, these metals are packed in a shell. The shell is placed in a paper tube with a fuse.

When the fuse is lit, the shell launches. Pressure builds within the shell, causing it to burst. Metal particles scatter, are instantly oxidized, and become cascades of glittering, diamond – like light.

Special effects depend on how innovators pack the shells and allow the gas to escape. Science and art work together to amaze us with brilliant waterfalls, flowers, rings and spiders.

# First, think about what you already know about fireworks. After you finish thinking, please read the passage, "Razzle Dazzle Science: How Fireworks Work."

Next, based on the passage, write a list of the multiple causes of a firework.

Then highlight any signal words that the author used to help structure his/her writing.

Finally, create a graphic organizer that helps you visualize how multiple causes create a firework explosion. This will help you remember the author's main points and give you an understanding of how fireworks work. Compare your answers with D'Sean's Think Aloud.