4th Grade Homework #3 Student Name:

Chaparral Ecosystems

Cross-Curricular Focus: Life Science

Chaparral ecosystems are relatively rare shrubland communities that actually benefit from wildfires. The largest chaparral ecosystems are found in the state of California in the United States, parts of Northern Mexico, Australia, Chile, and South Africa. Winters in this ecosystem are mild and wet, and the summers tend to be hot and dry. Wildfires occur frequently, with highly flammable plant growth building up in between fire seasons. With an average rainfall of only 15-39 inches of rain per year, shrub plants of the chaparral are most likely to catch fire during the extra dry conditions of late summer and early fall. Although the thought of fire is frightening to those with homes or businesses close to chaparral growth, it is actually far more dangerous to prevent wildfires and allow shrubs to take over. Small fires once in a while are actually beneficial to the chaparral communities, keeping the plant growth under control and acting in some other surprising ways. There are some plant species living in chaparral ecosystems that cannot reproduce unless there has been a fire. The heat, smoke, and changes in the soil following a burn actually release seeds from some plants, and create ideal growing conditions for others.

What causes the frequent fires in this region? Sometimes lightning strikes will start vegetation on fire, but this accounts for only a small portion of the fires. Humans are the cause of wildfires more often than not. A match, cigarette, or campfire is left carelessly unattended, and hot dry winds, like the Santa Ana winds in California, whip the fire into an untamed blaze. If it has been a long time since the last fire, vegetation will fuel the fires, often making them difficult for firefighters to put down. People who live in and near chaparral ecosystems have to be very careful to keep a vegetation-free zone clear around homes and other buildings to prevent fire damage. Buildings on hillsides are also in danger of mudslides if rains follow wildfires. Although there are definite hazards in this ecosystem, when people take steps to ensure safety, wildfires are a natural and important part of a healthy chaparral system.

1) What can people do to prevent accidental fires?

_____

_____

_____

2) Give one statement from the passage that supports the idea that we should allow wildfires to burn.

_____

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3) How would an increase in rain affect the chaparral ecosystem?

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Writing Assignment: There are lots of disagreements between people who think we must prevent all wildfires, and people who think we need to let them burn. What do you think? Why? On a separate sheet of lined paper, write a paragraph of 5-8 sentences to convince someone to think that your point of view is correct. Pay attention to spelling, capitalization, and punctuation, and make sure that your work is neat and easy to read. You should have a title, and a proper heading in the top right corner (name, group, date, assignment).

Academic Vocabulary:

1. Why do you think you could **convince** your friend to do?

_____

2. Name two things that could **persuade** someone to do something.

_____

3. What are some qualities a **persuasive** person might have?

_____

4th Grade Homework #3 Due:

Math: Current Skills Practice.

Compare the number pairs below using the symbols <, >, or =

1. 3,598 ◯ 3,588
2. 17,233 ◯ 1,723
3. 837 ◯ 837
4. 2,305 ◯ 4,210
5. 11,329 ◯ 13,219
6. 38,201 ◯ 38,103
7. 34,723 ◯ 33,923
8. 5,531 ◯ 5,431

Math Review : Tell whether each number is odd or even.

1. 3,241 _____
2. 830 _____
3. 93,856 _____
4. 62,785 _____

Multiplication Facts/Fact Families
Daily Practice – 15 minutes

Mon.	
Tues.	
Weds.	
Thurs.	

Home Reading Log:
Read 30 min. daily.

	Book Title	Chapter(s)	Parent Initials
Mon.			
Tues.			
Weds.			
Thurs.			