

Name: _____

Making Connections: Friction and Vehicle Tires

SPH4C

Read p. 59 – 60 and answer the following questions. (Point form answers are acceptable.)

1. What are the sipes on a tire? What is their purpose?

2. What happens to the coefficient of friction between a tire and the road when the road is wet? Would your answer change for a race car tire that had no sipes? Explain.

3. Why do most car owners use the same tires all year round? Is this always a good idea? Explain.

4. Why is correct air pressure important for tires? What can happen if the pressure is too low?

5. How is the relationship between the friction and the surface area of tires unusual?

Research UTQS ratings and explain what each of the following ratings means (look for specific numbers corresponding to each rating):

Type	Rating	Meaning
Traction	AA	
	A	
	B	
	C	
Treadwear	> 100	
	100	
	< 100	
Temperature	A	
	B	
	C	

Look up a specific tire (your choice). What is its rating? How safe do you think it is? Explain.

Tire: _____

Rating: _____

Safety: _____