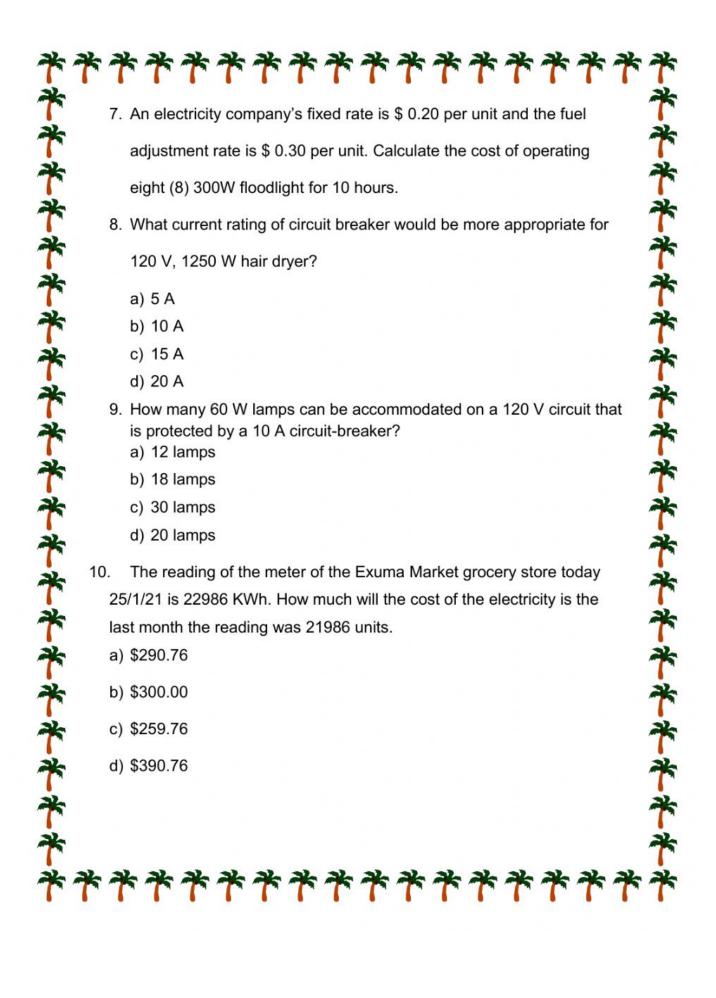
**** L. N. Coakley Science Department **Energy Unit Quiz** ***** Name: Date: Grade 1. The diagram below shows how the electrical energy is distributed from the power station to the consumers. 1. Which two of the following parts are the component of the power grid? a) Wires and power station b) Power station and transformers c) Wires and transformers d) Transformers and consumers 2. Which of the following statement best define the definition of power grid? a) The system of cables and transformers linking the power station to the consumers b) The system made up the power stations (Non-renewable and Renewable), cables, transformers, and the consumers. c) The system made up the power station, cables and the consumers. d) All of the above.

-	transformer	to increase the	a
reduce t	the Re	educing the current makes	the trans
of electr	ricity more efficient a	as less energy is loss in t	the form
	The form the ϵ	electricity gets to our home,	the volta
needs to	b beb	ack down to a safe level, th	e electric
therefore	e passes through a _	transforme	r.
4. Generating	stations send power	long distances using.	
a) High vol	tage, high current		
b) High vol	tage, low current		
c) Low volt	tage, high current		
d) Low volt	tage, low current		
5. Mention 3 i electrical a		to consider when we are w	orking w

********** 6. The following diagram shows the electrical circuit of the drawing of ***** the house. **** a) What color wire represents the live wire? b) What color wire represents the neutral wire? c) What color wire represents the earth wire? d) What is the function of the company's main fuse? e) Why the water heater and the electrical stove are connected to a separate circuit and not to the ring circuit?



****************** 11. An electric stove has three stove-top heating elements of resistance ***** ***** 48Ω each and one of resistance 24Ω . The elements can be switch on and off independently. Select the circuit diagram that fits more to the specifications, (the i. symbol for a resistor is been used as that for a heating element) to show how the elements and the switches are connected to the live and neutral wires of a 240 V supply. # D B A C D ii. Calculate the total current drawn from the supply when all four elements are operating at full power. iii. Calculate the power of the stove.