

Name \_\_\_\_\_

Period \_\_\_\_\_

### Calculating Kilowatt-hours of Common Appliances

Unit rate: 1 kilowatt-hour = 1,000 watts

<b>Appliance</b>	<b>Watts</b>	<b>Calculations (Show work)</b>	<b>kWh</b>
<b>Microwave oven</b>	1,500 W		
<b>Cable box</b>	140 W		
<b>Clothes dryer</b>	2790 W		
<b>Clothes washer</b>	255 W		
<b>Refrigerator</b>	225 W		
<b>Wi-fi Router</b>	6 W		
<b>LCD Television</b>	150 W		
<b>X-Box game console</b>	36 W		
<b>Water Heater</b>	4500 W		
<b>Laptop computer</b>	25 W		

Name \_\_\_\_\_

Period \_\_\_\_\_

## Calculating Unit Rate Worksheet

**Directions:** Use the sample utility bill to calculate the unit rate charged for the energy charge, fuel cost charge, and the demand charge.

### Sample Energy Bill

METER READING INFORMATION			
METER#	Read Dates: 03/24/14 - 04/22/14 (29 Days)		
DESCRIPTION	CURRENT READING	PREVIOUS READING	USAGE
Total Energy	63084 Actual	61299 Actual	1785 kWh
Demand	Actual		5.97 kW
Billable Demand			6 kW

ELECTRICITY CHARGES		RATE: General Service	
DESCRIPTION	USAGE UNITS	RATE	CHARGE
Basic Service Chg			\$25.70
Energy Charge	1785 kWh		\$53.21
Fuel Cost Charge	1785 kWh		\$54.94
Demand Charge Winter	6 kW		\$53.88
Affordability Chrg			\$2.68
Resource Adjustment			\$8.08
Interim Rate Adj			\$8.78
<b>Subtotal</b>			<b>\$207.27</b>
Transit Improvement Tax		0.25%	\$0.53
State Tax		6.875%	\$14.25
<b>Total</b>			<b>\$222.05</b>

1. A customer used 1785 kWh and was charged \$53.21 for energy. What is the unit rate per kWh the customer was charged for energy?
2. A customer used 1785 kWh and was charged \$54.94 for fuel cost. What is the unit rate per kWh the customer was charged for fuel cost?
3. A customer used 6 kW and was charged \$53.88 for a winter demand charge. What is the unit rate per kW the customer was charged for the winter demand charge?