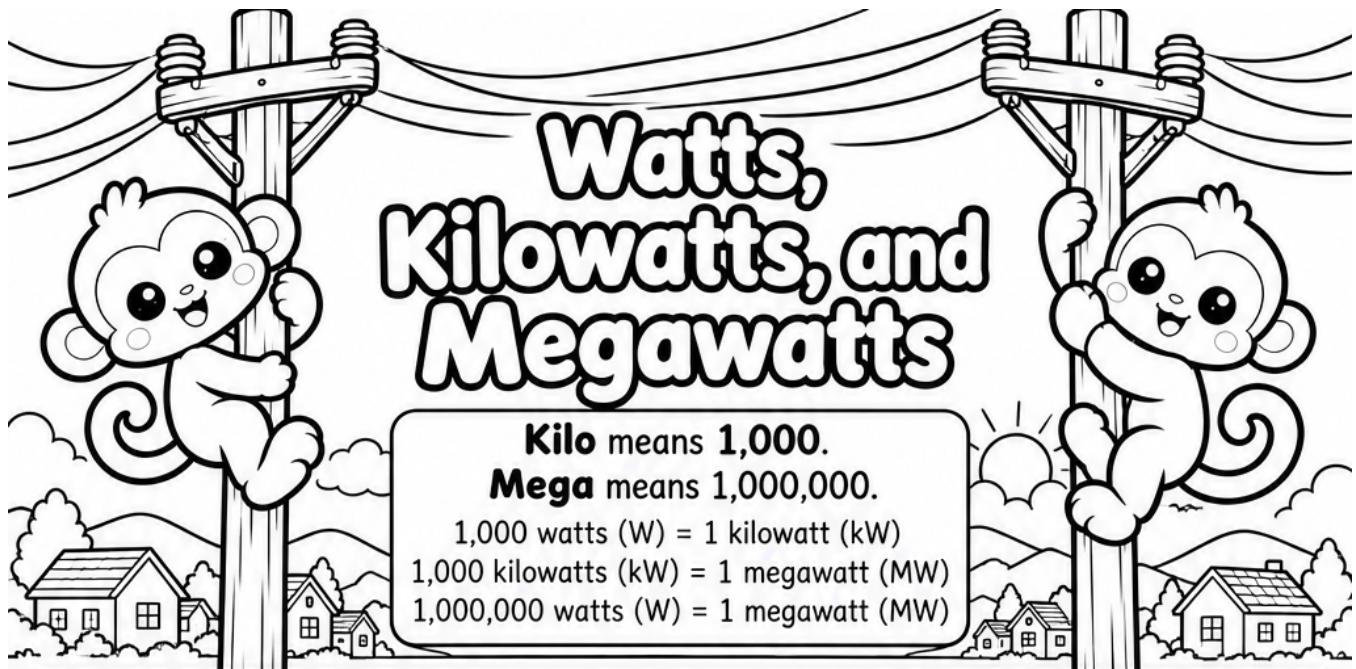




Practice 1: Convert the units. Show your work if needed.

1. Watts to kilowatts (W to kW)

- a) 1,000 W = _____ kW
- b) 2,500 W = _____ kW
- c) 7,000 W = _____ kW
- d) 12,000 W = _____ kW
- e) 50,000 W = _____ kW

2. Kilowatts to watts (kW to W)

- a) 1 kW = _____ W
- b) 3 kW = _____ W
- c) 5.5 kW = _____ W
- d) 12 kW = _____ W
- e) 20 kW = _____ W

3. Kilowatts to megawatts (kW to MW)

- a) 1,000 kW = _____ MW
- b) 2,500 kW = _____ MW
- c) 5,000 kW = _____ MW
- d) 12,000 kW = _____ MW
- e) 25,000 kW = _____ MW

4. Megawatts to kilowatts (MW to kW)

- a) 1 MW = _____ kW
- b) 2 MW = _____ kW
- c) 3.5 MW = _____ kW
- d) 10 MW = _____ kW
- e) 25 MW = _____ kW

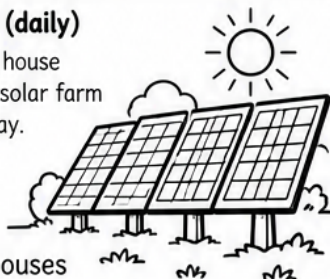
Practice 2: Energy City Word Problems Use the information given. Show your work if needed.

5. Solar farm to houses (daily)

In Energy City, assume each house needs 5 kWh per day. Each solar farm produces 20,000 kWh per day.

How many houses can each solar farm power?

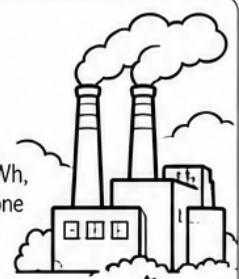
Answer: _____ houses



6. Natural gas plant at night

At night, each house needs 3 kWh of power. When solar goes down, houses will need to get their energy from another energy source. If each natural gas plant produces 50,000 kWh, how many houses can be supplied by one power plant?

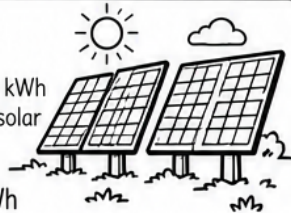
Answer: _____ houses



7. More solar farms

Energy City has 8 solar farms. Each solar farm produces 20,000 kWh per day. How many kWh do all 8 solar farms produce in one day?

Answer: _____ kWh



8. Day and night total for a house

Each house uses 5 kWh during the day and 3 kWh at night.

How many kWh does one house need in one full day?

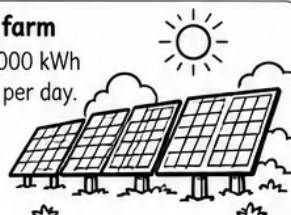
Answer: _____ kWh



9. Houses for a larger solar farm

A larger solar farm produces 120,000 kWh per day. Each house needs 5 kWh per day. How many houses can it power?

Answer: _____ houses



10. Total houses in Energy City

Energy City has 3 natural gas plants. Each plant produces 50,000 kWh at night. Each house needs 3 kWh at night. How many houses can be supplied by all 3 plants at night?

Answer: _____ houses

