

# Recycling Math

## HOW MUCH POWER DO CANS USE?

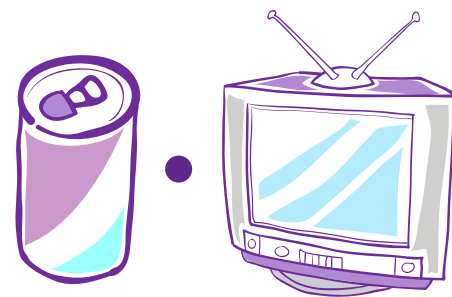
Help students discover the power of cumulative individual actions.

### Soft Drink Cans and TV Viewing

Remind the class that recycling one soft-drink can saves enough energy to run a color TV for 3 hours.

Have each student indicate the number of hours a color television is on in their home (total hours for all sets) rounded to the nearest 3: 0 hours, 3 hours, 6 hours, 9 hours, 12 hours or 15 hours.

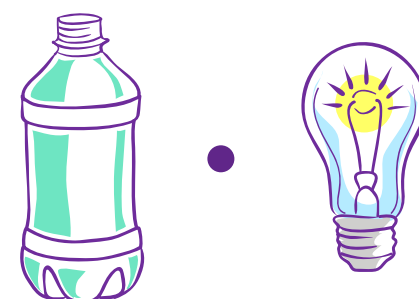
Have the students calculate how many cans they would need to recycle to save enough energy to run their TV.



### Soft Drink Bottles and Lights

Recycling one soft-drink bottle (2-liter plastic) saves enough energy to light a 100-watt bulb for four hours.

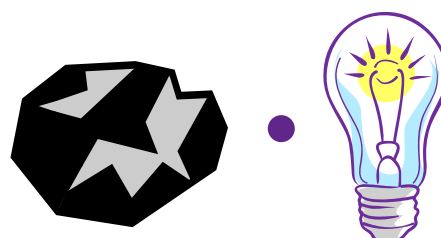
How many bottles would you have to recycle to run a 100-watt bulb for 12 hours?



### Coal Used to Burn a Light

It takes about 100 pounds of coal to produce the electricity to light a 100-watt light bulb 3 hours a day for a year.

How much coal would it take to light a 100-watt bulb for 12 hours a day?



### BONUS ACTIVITY

To emphasize the power of cumulative individual actions, have the students estimate how many televisions or 100-watt light bulbs there might be in their school, neighborhood, block, city or state.

Then using the calculations above, determine how many soft drink cans or bottles need to be recycled to run those televisions or light bulbs for specific periods of time.