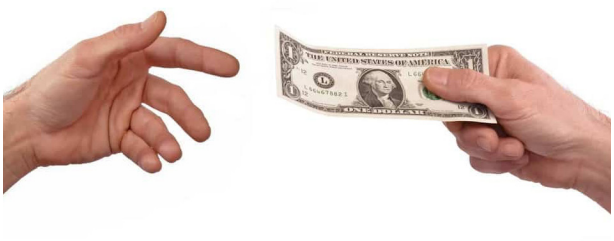


The Pay Me Game

Lesson Overview

Students will use play money to understand the dollar cost of their energy habits.

Time

20–30 minutes

Materials

2 envelopes, 1 marked "me" and 1 marked "utility" for each student, $100 Pay Me Game Money per student, copy of The Pay Me Game Questions

Vocabulary

utility, save, spend

Background Information:

Students have a hard time understanding how much energy they are using if it is not tied to dollar amounts. They know how much a candy bar, a pair of shoes or a movie ticket costs. In this lesson they will use play energy money to learn some of the dollar amounts attached to a shower, the refrigerator or their pool. The dollar amounts for this game are based on amount of energy used multiplied by the state average for electricity costs.

Activity 1: The Pay Me Game

Print and cut one Pay Me Game Money page for each student. If working with more than one class of students, consider laminating the money. Select questions from the Pay Me Game to ask students.

Give each student one "me" envelope, one "utility" envelope and $100, made up of 10 $5s and five $10s (one page of pre-cut money).

Tell students that they have just gotten paid $100, and whatever they and their family don't spend on energy at home, they can use to buy things they want. Read each selected The Pay Me Game question to the group. Depending on their answer, the students will put the required amount of money in either their "me" envelope or in their "utility" envelope. If a student runs out of money before the end of the game they may borrow from their "me" envelope to pay the "utility bill."

At the end of the game, students discard any money that is still in their hand. Count the money in each envelope to show the students how much their energy habits are costing them.

Note: you may want to delete questions or change them depending on students in your area. If you know no one has a pool at home you may want to omit that question, however if you do ask it, the students will see how much they are saving by not having a pool.

Discussion:

How much the student learns from this depends on you. If you quickly discuss the "why's" of the questions with the students they will have a better understanding of how to change their energy practices. Stress to the students that this is a game for them to see how much extra energy they really use. So it is best if they answer the questions honestly. If this was real money, and students could use any money that they could save, what would they do?

Extension:

Utility companies produce good pamphlets with energy saving tips. You could get copies for your students to take home as a follow-up to this activity. Alternatively, ask students to write down those behaviors that "cost" them money to the utility. They can bring that list home and discuss what they learned about the costs of electricity.

TEKS

Math: 3.1 (C), 3.15 (A, D), 4.3 (A), 4.14 (A, B), 5.3 (A), 5.14 (A), 6.11 (A)

Science: 3.3 (C), 4.3 (C), 5.3 (C), 6.3 (C)

Social Studies: 3.6 (A, B), 3.8 (B), 5.13 (A, B)

Watt Watchers of Texas

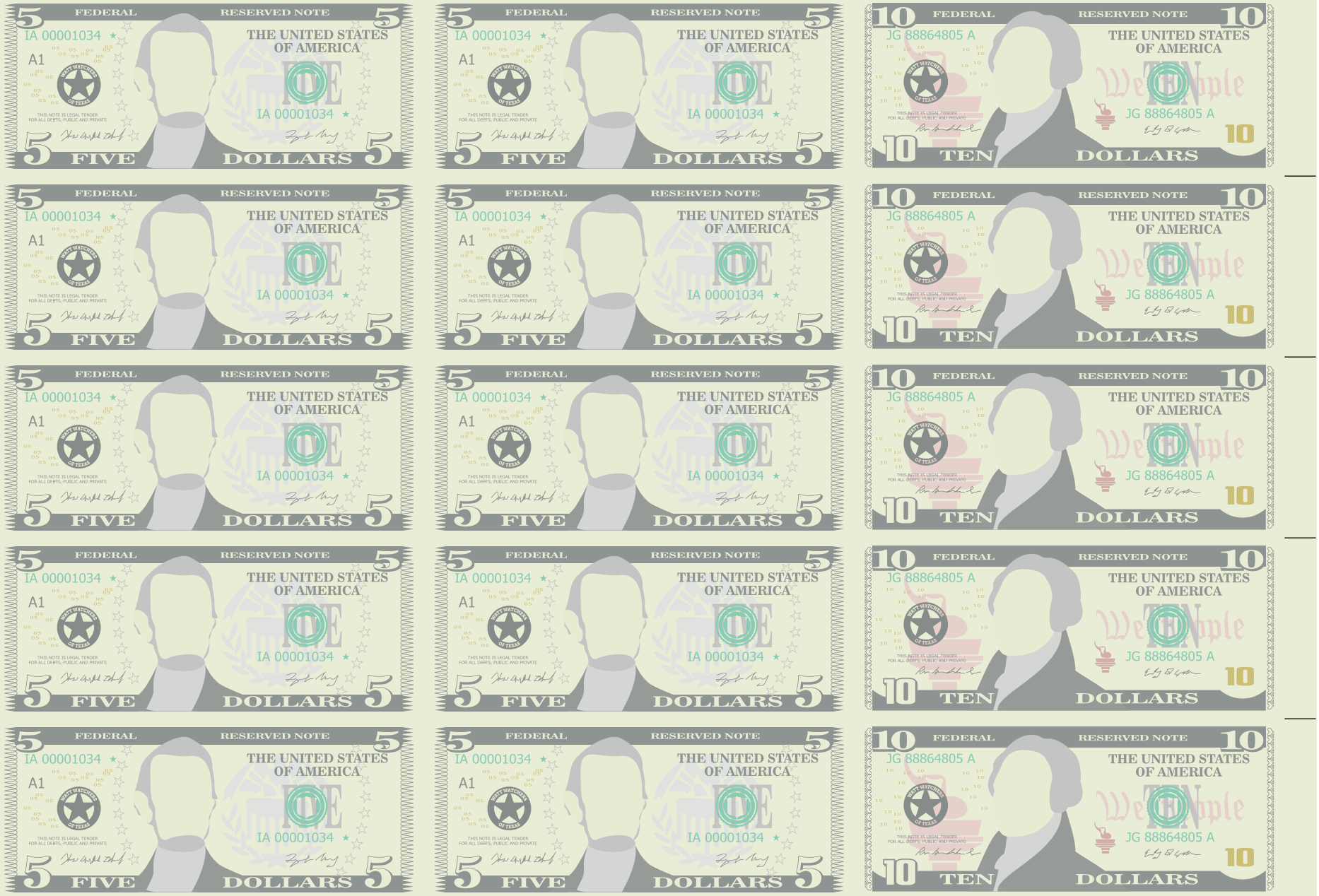
The Pay Me Game Money

Print and cut out this sheetfor each student to have $100: 10 x $5, 5 x $10

www.watt-watchers.com/knowledge-is-power/the-pay-me-game

cut here

cut here



The "Pay Me" Game Questions

Question: Do you have air conditioning for your entire house?

Yes: pay UTILITY $10

(The average central air conditioner costs between 20-60 cents an hour to operate. You can save money on refrigerated air conditioning if you keep windows and doors closed during the heat of the day. At night you can turn off the air conditioner, open the doors and windows and turn on fans to get cool outdoor air into the house. Be sure to close the house back up before it gets warm the following day.)

Question: Do you have a window air conditioner for one room?

Yes: pay UTILITY $20

No: pay ME $20

(Cooling only one room or area of your house costs much less than cooling the entire house. Keep the doors closed to unused rooms.)

Question: Do you use a portable electric heater in the winter?

Yes: pay ME $10

No: pay UTILITY $10

(In general, portable heaters are one of the least efficient heating sources. If you're the only one that is cold, consider putting on an extra sweater or socks instead of using the heater to warm up your room.)

Question: In the summer are the drapes or blinds in your home closed to keep out the heat?

Yes: Pay ME $10

No: pay UTILITY $5

(Closing drapes and putting up shades keeps the sun and warm air from getting into your house, which keeps your house much cooler. Students will probably be familiar with how light coming through a window can heat up a car on a hot day. A house with direct sunlight coming in heats up the same way.)

Question: Do you have more than one refrigerator or freezer at your house?

Yes: pay UTILITY $10 for every extra refrigerator or freezer

(The average refrigerator costs about $7 a month; that's $84 a year)

Question: Do you take baths in the bathtub?

Yes: pay UTILITY $5

(A bath takes at least 15 gallons of hot water, that's at least 24 cents per bath. In a month that's $7.20 per person)

Question: Do you take showers that are less than 5 minutes long?

Yes: pay ME $5

No: pay UTILITY $5

(A shower that is less than 5 minutes will use less than 20 cents of hot water.)

Question: Do you always turn off the lights every time you leave a room?

Yes: pay ME $5

No: pay UTILITY $5

Question: Are your clothes dried in a clothes dryer?

Yes: pay UTILITY $10

No: pay ME $10

(It costs about 33 cents an hour to operate. This can get very expensive after a few loads of clothes. Cleaning the filters after each load is dried and drying one load after another so the drum doesn't have to be reheated for each load will save money.)

Question: Do you have a laptop or tablet at home?

Yes: pay UTILITY $5 for every laptop or tablet in your house.

(Even though most laptops use a small amount of electricity, they are often used for several hours and the electricity adds up. Save energy by only plugging them in when they need to be charged and unplugging the charger from the wall when they are fully charged.)

Question: Do you have a TV in your house?

Yes: pay UTILITY $5 per TV in your house

(It costs the average household about $2.50 a month to use a TV.)

Question: Do you have cable or satellite TV?

Yes: pay UTILITY $5

No: pay ME $5

(Cable is powered by a cable box and satellite TV by a satellite dish, both of which use constant electricity to power.)

Question: Do you play video games?

Yes: pay UTILITY $5 for every game console in your house

No: pay ME $5

(Even though most video games are electronic and use a small amount of electricity, usually they are played for many hours and the electricity adds up.)

Energy cost was calculated at $0.12/kWh, the 2015 U.S. average, according to the U.S. Department of Energy.