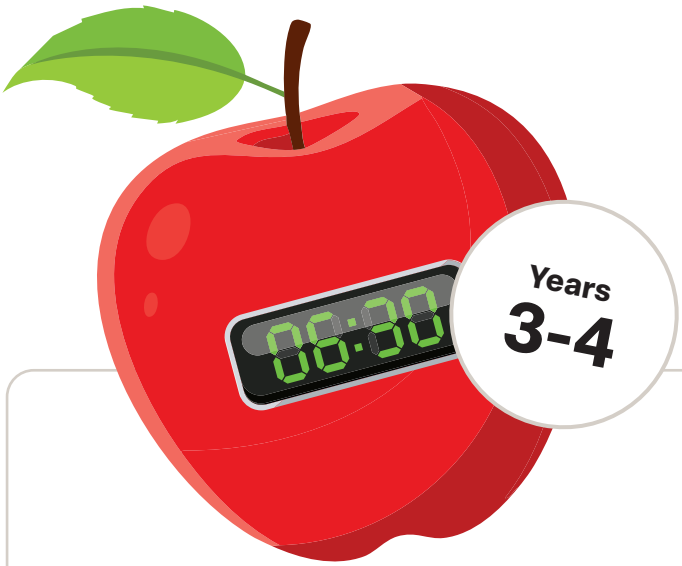

Can an apple really tell the time?

No, not *that* kind of Apple Watch, but some fruit really can power a clock! It sounds like magic… but it's all science. In this curious classroom challenge, students explore how fruit can power a clock using chemical energy. With the **Fruit Clock Kit**, they'll test different fruits, compare results, and decode what makes some produce more power than others.

Curriculum Links

Foundation - Years 3–4 (v9):

AC9S4U03
Energy can be transferred in various ways and used to generate change

AC9S4I02
Pose questions and make predictions based on observations

AC9S4I04
Represent data in tables and simple graphs

Activity Idea:

Make Your Fruit Work

Theme link: Decoding hidden energy in everyday things

You'll need:

- [ ] Fruit Clock
- [ ] Variety of fruit or vegetables (lemon, apple, potato, etc.)
- [ ] Data recording sheet or whiteboards
- [ ] **Optional:** stopwatch, voltmeter, graphing tools

1. Introduce the challenge: Can we make a clock run on fruit?
2. Using the **Fruit Clock Kit**, students test different fruits (lemon, apple, orange, potato).
3. Record: Which fruit works best? How long does it run?
4. Discuss: Why do some fruits produce more voltage? What is the science behind it?
5. Graph the results and reflect on how we decode energy from things we eat or throw away!

Extend

Introduce the idea of batteries vs natural materials. Could fruit-powered devices help reduce waste?

Can an Apple Really Tell the Time?
Investigation Sheet

In this activity, you will use fruit or vegetables to power a digital clock. Your goal is to test different fruits, make predictions, and collect data to discover which one works best.

Make a prediction

Which fruit do you think will work best to power the clock? Why?

Test your fruits

Fruit or Veg Tested

Did it power the clock?
Circle one:

Yes No

How long did it run? (min)

Notes or observations

What did you discover?

Which fruit powered the clock the best?

Why do you think that fruit worked better than others?

What do fruits and batteries have in common?

What surprised you most during this investigation?