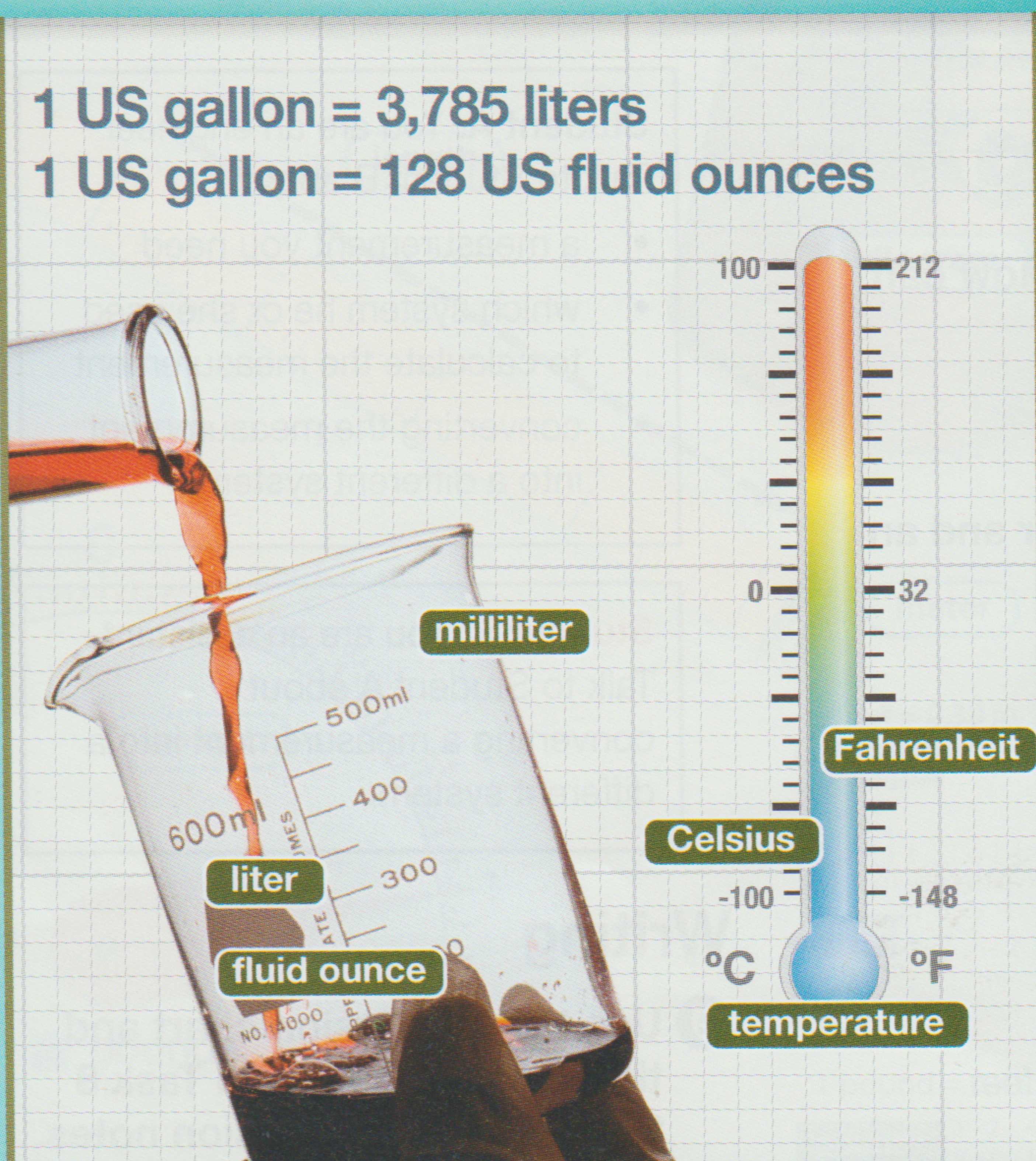


10 Measurements 2

Get ready!

1 Before you read the passage, talk about these questions.

- 1 What are some different measurements of volume?
- 2 What is the difference between the Celsius system and the Fahrenheit system?



To: l.stevens@gradycorp.net
From: k.fanshaw@gradycorp.net
Subject: Measurements on the Lynwood project

Hi Lisa,

I need some new measurements on the Lynwood project. Some of the quantities were in the wrong measurement system.

The liquid measurements must be in metric units. You recorded the **volume** in **gallons** and **fluid ounces**. I need them in **liters** instead. And remember, don't express small quantities as **cubic centimeters**. Our company always expresses them as **milliliters** instead.

Also, we need new measurements of **temperature**. We always use the **Celsius** scale. You can **convert** the **Fahrenheit** measurements with a simple formula:

$$^{\circ}\text{C} \times \frac{9}{5} + 32 = ^{\circ}\text{F}$$

Please remember to record measurements correctly next time. Let me know if you have any questions.

Kevin

Reading

2 Read the email. Then, choose the correct answers.

- 1 What is the email mainly about?
 - A which features of a machine to measure
 - B the benefits of using a particular measuring system
 - C the consequences of making errors when measuring
 - D measurements that need to be corrected
- 2 Which of the following is NOT an instruction in the email?
 - A Record volume measurements in fluid ounces.
 - B Avoid expressing measurements in gallons.
 - C Use milliliters instead of cubic centimeters.
 - D Convert Fahrenheit measurements into Celsius.
- 3 According to the email, what is the problem with the measurements?
 - A They are inaccurate.
 - B They are expressed in very small units.
 - C They are in the wrong system.
 - D They are incomplete.

Vocabulary

3 Match the words (1-6) with the definitions (A-F).

- | | |
|------------------|-------------------|
| 1 ___ Celsius | 4 ___ Fahrenheit |
| 2 ___ convert | 5 ___ fluid ounce |
| 3 ___ milliliter | 6 ___ temperature |

- A a measurement that uses the scale in which water boils at 100°
- B to change something into a different form or system
- C an imperial unit of volume
- D the measure of how hot or cold something is
- E a metric unit of volume
- F a measurement that uses the scale in which water boils at 212°

4 Read the sentences and choose the correct words or phrases.

- 1 The engineer measured the amount of water in **Celsius/liters**.
- 2 A **gallon/milliliter** contains 128 fluid ounces.
- 3 **Temperature/Volume** measures an amount of space.
- 4 A **cubic centimeter/fluid ounce** is a metric unit.

5 Listen and read the email again. What is the formula for converting Celsius to Fahrenheit?

Listening

6 Listen to a conversation between an engineer and an assistant. Mark the following statements as true (T) or false (F).

- 1 ☐ The man corrected the woman's volume measurement.
- 2 ☐ The woman calculated volume in fluid ounces.
- 3 ☐ The woman gives the temperature measurement in both scales.

7 Listen again and complete the conversation.

Engineer: Lisa, do you have the new measurements for the Lynwood project?

Assistant: Yes, I just 1 _____.

Engineer: Great. So 2 _____ of the fuel tank?

Assistant: Let me see. That was 94.5.

Engineer: Now that's a 3 _____, right?

Assistant: Yes. It was 25 4 _____. That times 3.78 equals about 94.5 liters.

Engineer: Okay. And 5 _____ the temperature in the tank?

Assistant: It was 104 degrees Fahrenheit. So that's about 40 6 _____.

Speaking

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

Do you have ...?
Now, that's a ... measurement, right?
That equals ...

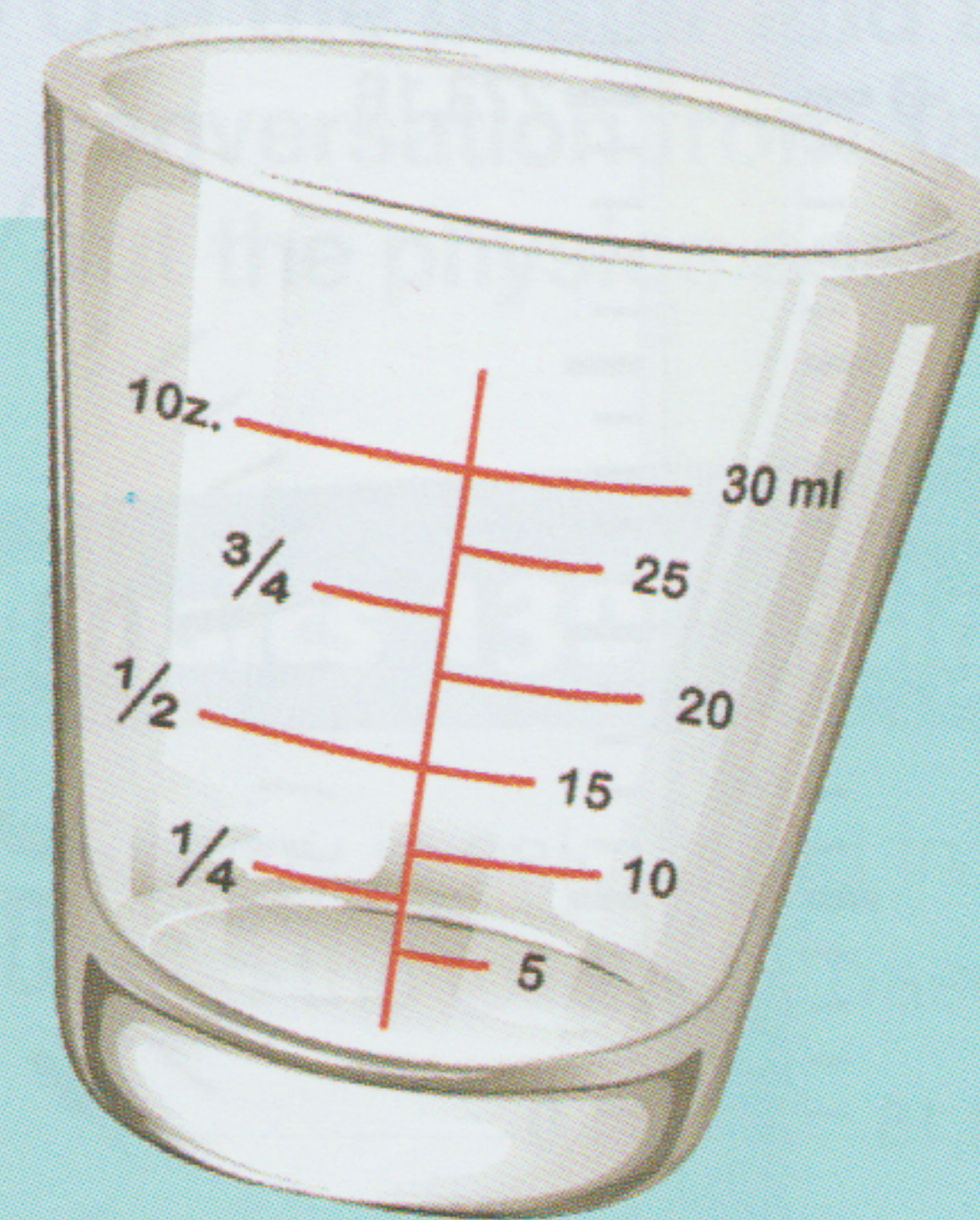
Student A: You are an engineer. Talk to Student B about:

- measurement conversions
- which types of measurements you need
- which system you prefer

Student B: You are an assistant. Talk to Student A about measurement conversions.

Writing

9 Use the email and the conversation from Task 8 to fill out the email from an assistant to an engineer.



Hi Kevin,

Here are the measurement conversions that you requested.

Volume: There were 3.6 _____ in the chamber. To convert that into _____ instead, I used the following formula: _____.

Temperature: The temperature was 60 degrees Celsius. To convert that into _____ instead, I used the following formula: _____.

I'll remember to use the correct system next time.

Lisa