PRACTICE PASSAGES (TEACHER GUIDE)

BUBBLING UP BALLOONS

1. The best answer is **B** because the experiment is set up to test carbon dioxide production.

   It is not **A** because the balloons were being tested for filling not shrinking. It is not **C** because the balloons are not reacting themselves to the yeast but rather measuring production. It is not **D** because water temperature was not part of the original experiment but rather mentioned as a follow up experiment.

2. The best answer is **C** because this result showed more carbon dioxide captured by the balloon.

   It is not **A** or **B** because these are not results; they are variables held constant. It is not **D** because the question asks about more production of carbon dioxide, not less.

3. The best answer is **C** because the balloon on the salt mixture was inflated the least.

   It is not **A** because the experiment was not about ethanol. It is not **B** because there was some effect as evidenced by it not inflating to the same amount as yeast alone. It is not **D** because it did not help in production, or the balloon would have been larger than for yeast alone.

4. The best answer is **C** because if one of the constants changes, it is best to make the same change in ratio to all the elements of the mixture.

   It is not **A, B,** or **D**, because these only double one other element of the mixture.

5. The best answer is **D** because the way this experiment is set up, it is only measuring for carbon dioxide. The data is not able to reflect any other byproducts of the reaction.

   It is not **A**, **B,** or **C** because these all do not reflect that ethanol production was not measured in this experiment.

6. The best answer is **B** because the experiment tests for carbon dioxide as a product of a reaction with yeast. The salt and sugar would not produce carbon dioxide alone.

   It is not **A** or **C** because this is only true when yeast is present. It is not **D** because the yeast is needed for the balloons to fill at all.

7. The best answer is **A** because it keeps the rest of the experiment constant to test just for water temperature.

   It is not **B, C,** or **D** because each of these answers suggests the addition of another variable that could change the results.

SPIN ME RIGHT ROUND

1. The best answer is **A** because Scientist 1 would attribute the increased factories to increased emissions, while Scientist 2 would attribute the increase in factories to increased property damage.

   It is not **B or D** as only Scientist 1 hypothesizes that climate change is increasing the damage due to hurricanes. It is not **C** because only Scientist 2 hypothesizes that increased building has led to increased damage from hurricanes.

2. The best answer is **C** because Scientist 1 is interested in intensity of hurricanes (wind speed) and Scientist 2 is interested in property damage.

   It is not **A, B,** or **C** because both Scientists are interested in the kind of information that is captured in the wind scale.

3. The best answer is **C** because Scientist 2's argument revolves around improvements in buildings leading more people to settle in certain areas.

   It is not **A** because where humans have moved does not play a role in Scientist 1's argument. It is not **B** because warmer air leads to hurricanes. It is not **D** because while this goes against Scientist 1's argument, it does not play a role in Scientist 2's hypothesis.

4. The best answer is **D** because this is Scientist 2's argument in the passage.

   It is not **A** because Scientist 2 believes climate change plays a smaller role than population change. It is not **B** because this is not found in the passage or part of Scientist 2's argument. It is not **C** because Scientist 2 does think climate change happens, just that it is not the main cause of increased hurricane damage.

5. The best answer is **A** because more damage inland would not support that increased building and population movement is the main driver of hurricane damage.

   It is not **B** because this would actually support Scientist 2's argument. It is not **C** because greenhouse gases are not a factor in Scientist 2's hypothesis. It is not **D** because Scientist 2 is focused on hurricane damage, not frequency and intensity.

6. The best answer is **C** because it is stated in the passage that the melting of the polar ice caps is a major factor in rising sea levels.

   It is not **A, B, or D** because the passage does not support these assumptions.

7. The best answer is **B** because Scientist 1 hypothesizes that increased greenhouse gases would increase the melting of the polar ice caps, leading to rising sea levels.

   It is not **A** because decreased damage to property might mean that hurricane frequency and severity decreased. It is not **B** because Scientist 1 predicts that higher ocean temperatures will lead to more hurricanes. Likewise, it is not **D** because Scientist 1 also predicts hurricanes will take new paths due to climate change.

WIND, SUN, AND RAIN ON THE PLAINS

1. The best answer is **D** because there are three cameras taking pictures every two hours out of 24 total hours or twelve times. Three times twelve is 36.

   It is not **A, B, or C** as these do not have the correct number of measurements/photos being taken.

2. The best answer is **B** because Observation 2 took 36 measurements each day; whereas, Observation 3 took only 30 measurements per day, and Observation 1 only took four measurements per day.

   It is not **A or C** because Observation 1 took only four measurements a day, and Observation 3 took 30 measurements. It is not **D** because they did not collect the same amount of measurements in a day/week.

3. The best answer is **B**, because Lawton has the lowest amount of cloud coverage in the week measured.

   It is not **A** or **C**, because these cities had higher cloud coverage than Lawton for the week recorded. It is not **D** because we can tell from the data which city got the most sun.

4. The best answer is **C** because Lawton has the highest wind speed for the week, but does not have the most or least rain.

   It is not **A or B** because the highest wind speed does not equate to the highest or lowest rainfall. It is not **D** because you can make an educated guess from the data.

5. The best answer is **B** because more barometers cover more area, getting a more accurate picture of the amount of rain in the city.

   It is not **A** because anemometers measure wind speed. It is not **C** because getting readings more often does not increase accuracy for rainfall. It is also not **D** because this would not increase the accuracy, just the amount of rain.

6. The best answer is **A** because one week is a relatively short amount of time to make such a sweeping claim.

   It is not **B** because this is a commonly accepted method of estimating cloud coverage. It is not **C** because while this is true, it is not enough data upon which to make such a claim. Furthermore, it is not **D** because this is too short of a timeframe to make this assumption.

7. The best answer is **C** because this represents many different parts of the United States.

   It is not **A, B, or D** because each of these options is clustered in a relatively small area of the United States.