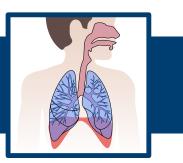
LESSON 3: RESPIRATORY EXPLORATORY Activity 3A: Dust & Us!



PROCESSING OUT

- 1. How many particles did you count?
- 2. What shapes of particles did you capture?
- 3. What do you think these particles are?
- **4.** What components of the respiratory system help trap and eliminate particulates from the air you breathe?
- 5. What impact could these particulates have on the following individuals. Include how the particulates would impact the respiratory system and, in turn, would affect other body systems. Provide suggestions to address any possible adverse impacts.
 - a. A healthy person
 - a. Someone with a respiratory condition such as asthma
- 6. Create a hypothesis regarding how the location, time of day, and season during which the particulates were collected impacted the type and number of particulates collected. Describe how you would test the hypothesis.

HINT: Hypotheses are statements which must be measurable. Hypotheses start with a question, such as "does the color of a particulate have any impact on the respiratory system?" Restate the question as a statement and include measurements like increase, decrease, etc.:

"Increasing the number of blue particulates decreases the number of breaths per minute."

Write the hypothesis and description of how it would be tested on the back of this sheet. Drawings can be useful to illustrate your plan to test the hypothesis.