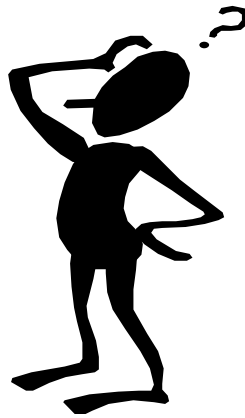


Solve It!

By Josh Adler



Taking time to understand a problem before trying to solve it is key. One thing all problems share is they give a chance to learn; and while not every problem has a simple solution, following these steps will make things clearer.

Ask questions.

What is the problem you're trying to solve? How do you get started? What are the most important parts of your problem? Who could be helpful? These are just a few questions that can get your brain thinking.

Questions can come from anywhere. Be sure to write them down as they come to you so you can remember them. Also, let one question lead to the next and follow your curiosity.

By asking as many questions as possible from the beginning, you can start to get a sense of what you know or don't know about the problem you're trying to solve. Some people call this step *brainstorming*, since once you start letting your curiosity lead the way, it can feel like there's a storm of things to try and understand.

As you start to feel like you've thought of every question you can imagine, look over your list. Do you have a clearer sense of what you need to know to solve your problem?

Look around you.

Observing means watching something closely. While watching living things you can also collect information that can help you answer your questions. Observing the way animals, plants, or people behave has led to many famous inventions.

Be sure to keep a specific question in mind when making observations. Write down what you notice for each question. Keep track of all your observations in one place, like a notebook or drawing pad.

Collect facts.

As you begin to better understand your problem you'll want to put together everything that you know is absolutely true. Once you've collected as many *facts*, or truths, related to your problem you'll begin to get ideas about how to take action.

Compare the information you've collected. Look it over carefully and think about everything you've learned about your problem. Now, solve it!

Name: _____ Date: _____

1. According to the passage, what do all problems share?

- A** They have a simple solution.
- B** They are confusing and hard to solve.
- C** They create new inventions.
- D** They give a chance to learn.

2. Which of the following shows the sequence of steps described in the passage in the correct order?

- A** ask questions about the problem; make observations and write down what you notice; collect facts related to the problem; think about what you have learned; solve the problem
- B** think about what you have learned; collect facts related to the problem; make observations and write down what you notice; ask questions about the problem; solve problem
- C** collect facts related to the problem; make observations and write down what you notice; ask questions about the problem; think about what you have learned; solve the problem
- D** make observations and write down what you notice; ask questions about the problem; think about what you have learned; collect facts related to the problem; solve the problem

3. Observing the things around you can help you solve a problem. What evidence from the passage best supports this conclusion?

- A** Writing questions down can help you remember them.
- B** While observing things you can collect information that can help you answer your questions.
- C** You should keep track of all your observations in one place, like a notebook or drawing pad.
- D** Keep a specific question in mind when making observations and write down what you notice.

4. Based on the passage, why is brainstorming a useful step in solving a problem?

- A** because it creates a storm in your brain of confusing questions and ideas
- B** because it can help you become a more curious and interesting person
- C** because it helps your discover questions related to the problem
- D** because it will show you that you don't know much about your problem

5. What is this passage mostly about?

- A steps you should follow when solving a problem
- B how observing things can help you answer questions
- C the activity of brainstorming and why it is useful
- D why you should ask questions when you have a problem

6. Read the following sentences: "Questions can come from anywhere. Be sure to write them down as they come to you so you can remember them. Also, let one question lead to the next and follow your **curiosity**."

As used in this sentence, what does the word "**curiosity**" mean?

- A disinterest in a topic or question
- B work that involves finding facts
- C state of being tired or bored
- D desire to know about something

7. Choose the answer that best completes the sentence below.

There are three main steps to solving a problem, _____ ask questions, look around you, and collect facts.

- A although
- B namely
- C finally
- D obviously

8. What does it mean to *observe* something?

9. According to the passage, what can you start to get a sense of by asking as many questions as possible?

10. Explain how asking questions is helpful when trying to solve a problem.

Teacher Guide & Answers

Passage Reading Level: Lexile 780

1. According to the passage, what do all problems share?
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 - A **ask questions about the problem; make observations and write down what you notice; collect facts related to the problem; think about what you have learned; solve the problem**
 - B think about what you have learned; collect facts related to the problem; make observations and write down what you notice; ask questions about the problem; solve problem
 - C collect facts related to the problem; make observations and write down what you notice; ask questions about the problem; think about what you have learned; solve the problem
 - D make observations and write down what you notice; ask questions about the problem; think about what you have learned; collect facts related to the problem; solve the problem

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- B **namely**
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8. What does it mean to *observe* something?

Suggested answer: When you observe something, you watch it closely.

9. According to the passage, what can you start to get a sense of by asking as many questions as possible?

Suggested answer: You can get a sense of what you know or don't know about the problem you're trying to solve.

10. Explain how asking questions is helpful when trying to solve a problem.

Suggested answer: Asking questions is helpful when trying to solve a problem because it can give you a sense of what you do and don't know about the problem you are trying to solve. As you find answers to these questions, you understand your problem better and are better equipped to solve it.