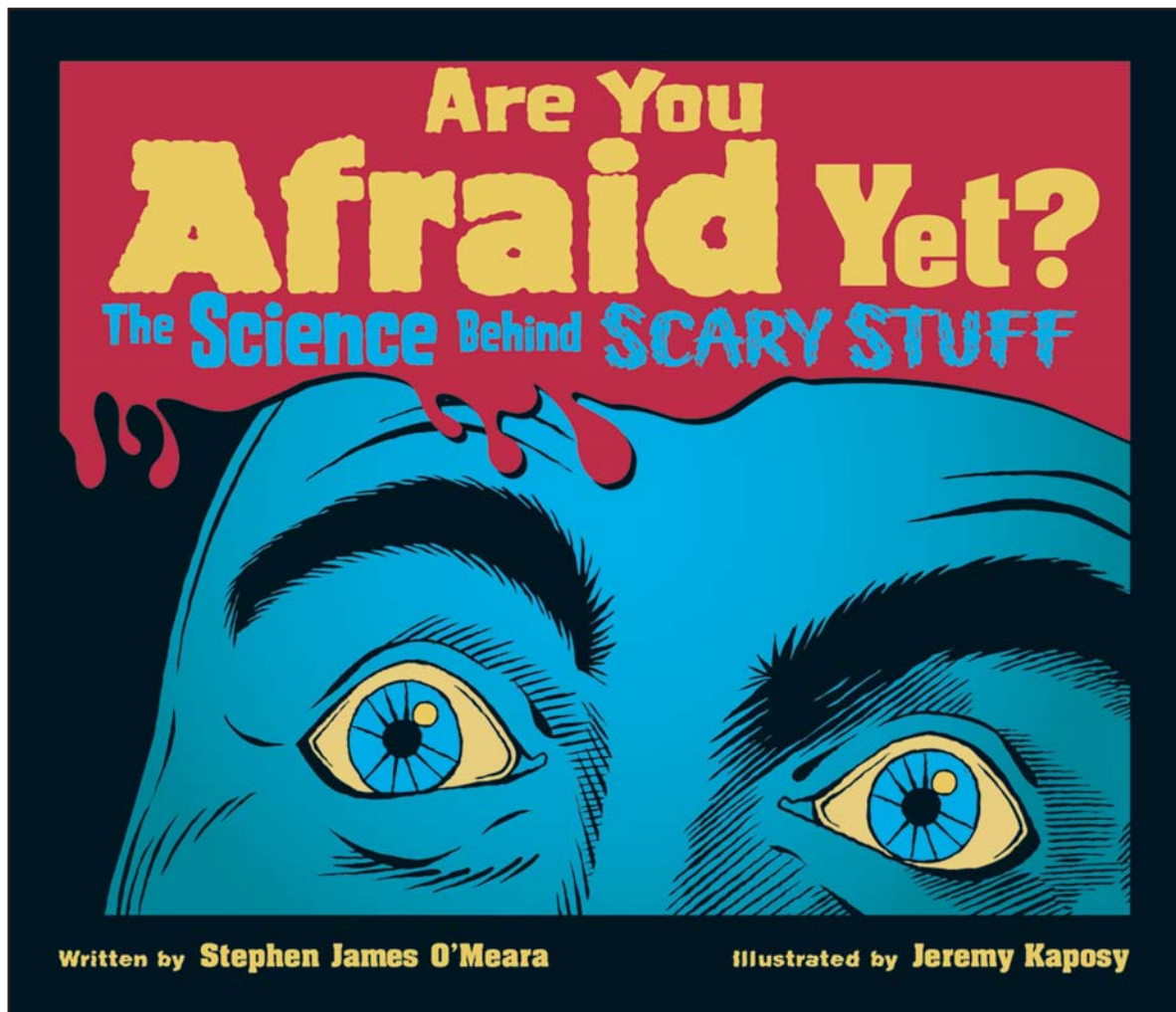


LEARNING RESOURCE MATERIAL



About Are You Afraid Yet?

Whatever your fear factor, you'll find it in this compendium of murder, mayhem and monsters. You will also find out what science has to say about the things that scare you. Whether you are wondering whether the tombs of the Pharaohs were cursed or if King Kong could really exist, you will find the answers to all your questions inside this book.

About the Author

Stephen James O'Meara is a scientist and science writer. And he believes he has actually seen a ghost.

Discussion Questions and Activities

The following discussion questions and activities support the science and language arts curriculum for students ages 9–12. Please note that some of these activities require students to visit their local or school library or use the Internet for research.

1. Share a Scary Story

Have volunteers in the class tell a scary story.

Write down the main features of each one.

When you have 10 or so stories, ask the students to look for common features. Here are some of the things they might spot:

- the story happens after dark
- it takes place in a scary location
- it involves an inhuman character, such as a ghost or monster
- something suddenly happens
- someone goes mad, gets injured or dies

Stories that prey on our minds feature common threads — such as the unknown, the dark and monstrous beings. These are things all humans fear, which is why stories about them have so much power over us.



2. Do-It-Yourself Monster

Part 1: Ask your students to read page 20 of *Are You Afraid Yet?* to learn how Mary Shelley invented Frankenstein's monster in her 1818 book, *Frankenstein*. Then ask students what they would do if they could create their own monster. What would they use for a brain? A computer? A transplanted human or animal brain? What would their monster look like? How would it move? What could it do? What would make it scary?



Part 2: Have students write a description of their monster coming to life. They should describe the setting and the moment. How would they feel as it took its first breath? Read the following passage from *Frankenstein* to set the mood. In it, Dr Frankenstein watches as his monstrous creation first opens its eyes and comes to life.

It was on a dreary night of November that I beheld the accomplishment of my toils. With an anxiety that almost amounted to agony, I collected the instruments of life around me, that I might infuse a spark of being into the lifeless thing that lay at my feet. It was already one in the morning; the rain pattered dismally against the panes, and my candle was nearly burnt out, when, by the glimmer of the half-extinguished light, I saw the dull yellow eye of the creature open; it breathed hard, and a convulsive motion agitated its limbs.

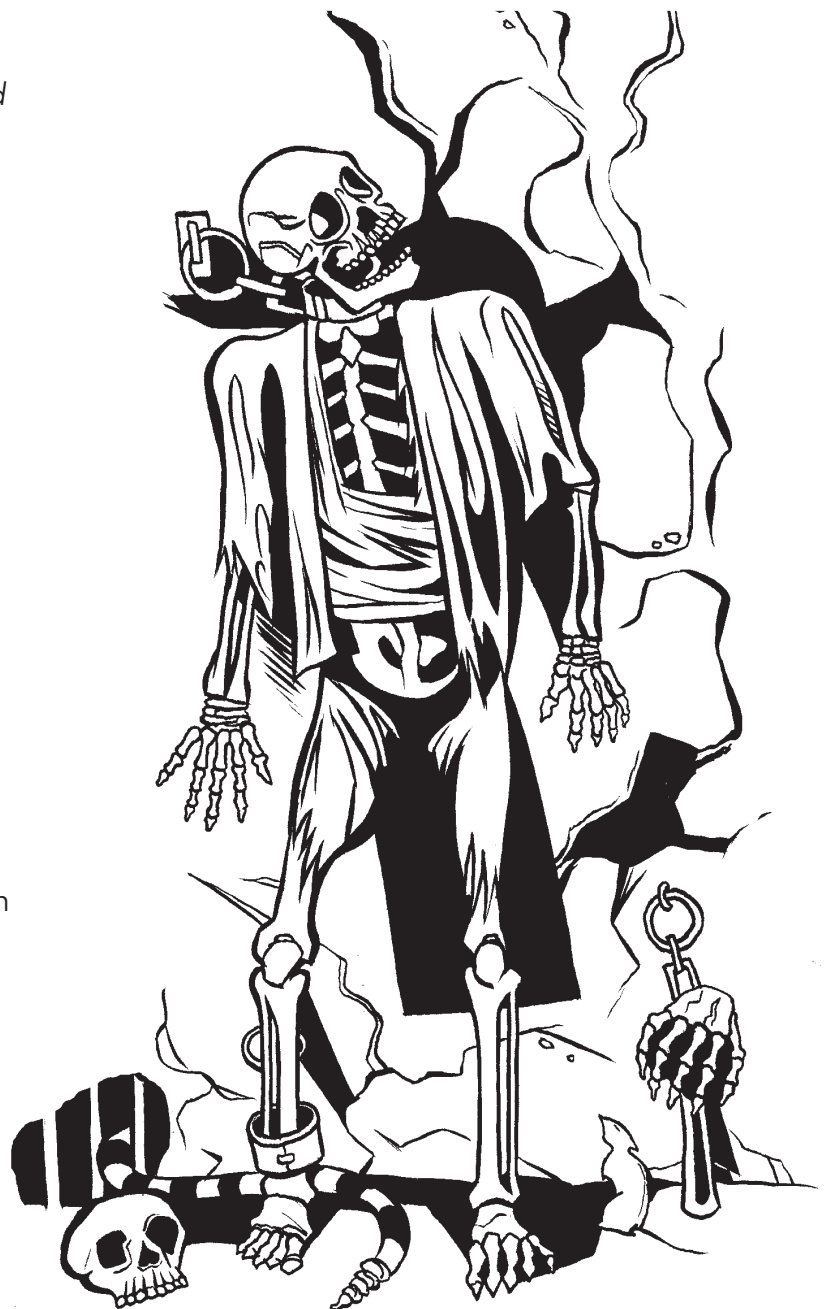
How can I describe my emotions at this catastrophe, or how delineate the wretch whom with such infinite pains and care I had endeavoured to form? His limbs were in proportion, and I had selected his features as beautiful. Beautiful! — Great God! His yellow skin scarcely covered the work of muscles and arteries beneath; his hair was of a lustrous black, and flowing; his teeth of a pearly whiteness; but these luxuriances only formed a more horrid contrast with his watery eyes, that seemed almost of the same colour as the dun white sockets in which they were set, his shrivelled complexion and straight black lips.

3. Bat's Enough

Have bats been given a bad rap by the horror movies? What is the real story of bats?

Stephen J. O'Meara gives some information on page 41 of *Are You Afraid Yet?*, but there's much more to learn. Divide your class into groups, and ask each group to use the library or the Internet to research one of the following questions. Students can then present their findings to the class.

- How many species of bats are there?
- What do the various species eat?
- Where, when and how do they sleep?
- How big are they?
- Do they raise their young?
- Do they migrate or stay in one place?
- What other animals scare us as much as bats? Is it possible they've been given a bad rap, too?



4. No Bones About It

Skeletons can be scary. But they're also very useful. Human skeletons give us a structure that supports our bodies and protects our delicate inner organs. What about animals that don't have bones? They are the invertebrates, which make up 98 per cent of all animal species on Earth.

Divide your class into groups, and ask each group to use the library or Internet to research one of the main groups of invertebrates (for example, Protozoa, Annelids, Mollusks, Crustaceans, Arachnids and Insects). Students should identify the main species within each group, and can then explore the different ways that invertebrates have to support themselves and protect their internal organs. (For example, some invertebrates have a hard exoskeleton, but others, such as worms, can move and live without any hard parts.)

5. Fact or Fiction?

In *Are You Afraid Yet?* author Stephen J. O'Meara looks at the things that frighten us and asks the question "Why?" Then he uses the tools of science to examine each phenomenon.

Ask your students to pick something that frightens them (snakes, heights, clowns, etc.). Then ask them to go through the "O'Meara process," demonstrated in the section on mummies on pages 47–53 of *Are You Afraid Yet?*, to determine the source of their fear and whether there is a valid reason for that fear. Students should work through each of the following steps, some of which will involve library or Internet research:

- How do you feel when you encounter the thing you're afraid of? Are there physical or emotional reactions that you can identify?
- Have other people shared this fear through history?
- What is the science behind your fear?
- Does the fear have any basis in fact that you can find through your research? In other words, could what you are afraid of really exist or really happen? And if it did, what could you do about it?

