

Worried Sick

Activity 3: Grades 5-8

FRONTIERS Pop-Quiz

Enter correct quizzes in the FRONTIERS Contest [see below!](#)



STUDENT :

TEACHER :

- 1) The "fight or flight" response is the physiological response to what?
 - a) hunger
 - b) extreme temperatures
 - c) stress
 - d) lack of sleep

- 2) How is primates' response to stress different from that of antelopes?

- 3) Which of the following is the MOST important predictor of stress levels in baboons?
 - a) personality
 - b) rank
 - c) how the troop treats the low-ranking
 - d) none of these

- 4) What do the scientists use to determine stress levels in the antelopes, baboons, macaques and people being studied?

5) Of the macaques in Jay Kaplan's lab, which suffer from greater stress, the dominant or submissive males?

6) Of the macaques in Kaplan's lab, what impact did greater stress have on the animals' health?

- a) the stressed animals had more cancer
- b) the stressed animals had twice the artery clogging
- c) the stressed animals ate fattier diet
- d) none of these.

7) Working with married couples, researchers studied how stress negatively affected which of the following:

- a) the reproductive system
- b) the cardiovascular system
- c) the immune system
- d) none of these

8) Working with stressed out students, the researchers found what remedy could counteract the physiological affects of stress?

9) When Hari Mandir Kaur Khalsa meditates in the MRI, what part of her brain appears more active?

- a) amygdala
- b) cerebrum
- c) frontal lobe
- d) all of these

10) As she meditates, Hari Mandir's breathing slows from 12 breaths per minute to 4. Does simply slowing one's breath affect the brain the same way as meditation?

NOTE: Only teachers may enter 100% correct quizzes into the FRONTIERS Contest. FRONTIERS will draw one entry randomly after each program. The selected student will receive a [Walkalong Glider](#), signed by [Tyler and Paul MacCready](#) Send all correct quizzes in one envelope, along with teacher's name, grade and course, school name and address, where the students watched the show (home or school), and the students' favorite segment. Mail to: FRONTIERS Quiz, Chedd-Angier Production Company, 70 Coolidge Hill Rd., Watertown, MA 02472.

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TEACHING GUIDE



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STUDENT:

TEACHER:

1)The "fight or flight" response is the physiological response to what?

c) stress

2) How is primates' response to stress different from that of antelopes?

Can be chronic in primates, Can be reaction to social factors, not physical danger. Antelopes physiology returns to normal when immediate threat has passed.

3) Which of the following is the MOST important predictor of stress levels in baboons?

a) personality

4) What do the scientists use to determine stress levels in the antelopes, baboons, macaques and people being studied?

Stress hormone levels in the blood, heart rate, blood pressure.

5) Of the macaques in Jay Kaplan's lab, which suffer from greater stress, the dominant or submissive males?

Dominant

6) Of the macaques in Kaplan's lab, what impact did greater stress have on the animals' health?

b) the stressed animals had twice the artery clogging

7) Working with married couples, researchers studied how stress negatively affected which of the following:

c) the immune system

8) Working with stressed out students, the researchers found what remedy could counteract the physiological affects of stress?

Guided relaxation techniques

9) When Hari Mandir Kaur Khalsa meditates in the MRI, what part of her brain appears more active?

a) amygdala

10) As she meditates, Hari Mandir's breathing slows from 12 breaths per minute to 4. Does simply slowing one's breath affect the brain the same way as meditation?

No. People who mechanically slowed their breath without meditation did not show the same brain activity as the people who meditated.