

Teacher's Guide for ODYSSEY

February 2011: Staying Healthy

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"Wrestling with Calories," pages 6–9

1. What is *chankonabe*?
2. What two qualities are essential to the physical make-up of a sumo wrestler?
3. How does a sumo wrestler achieve such a specialized physique?
4. Fill in the chart below to compare the physical requirements and dietary needs of the various athletes mentioned in the article.

Athlete	Sumo Wrestler	Distance Runner	Gymnast	Jockey
Physical Requirements	Bulk and strength		Brief, intense muscle power	
Diet	Excessive calories and slowed metabolic rates	Calories from carbohydrates		Minimum required calories and fluids

5. What kind of a diet would you need if you were a long distance runner who did the high jump?

"No One Above You!" and "Your Body at High Altitude," pages 10–13

1. How is the text of this article, an interview, structured, and how does it help you understand the information?
2. Do you think there were other questions the interviewer may have asked that weren't included here? Why weren't they included?
3. In the fourth paragraph, the descriptive text structure uses a simile, a comparison using *like* or *as*, to help us visualize what it is like to be in the thin air of a high altitude climb. What is that simile and how does it help you understand the text?
4. How does Melissa Arnot compensate for the thin air of a high altitude climb?

"Ten Reasons Why You Don't Exercise," pages 15–17

1. Define each of the following terms "vigorous aerobic activity," "muscle-strengthening activity," and "bone-strengthening activity."
2. Make a three-column chart with the headings "Vigorous Aerobic," "Muscle-strengthening," and "Bone-strengthening," and list examples of each kind of activity.
3. What type of physical activity do you like best and why?
4. What are the benefits of regular physical activity?

"On the Run . . . But Not Running on Empty," pages 20–21

- Keep a journal of the snacks that you eat each day for a week. At the end of the week, look over the foods that you have eaten. Do you eat more fruits and veggies or more sweets? How can you get more fruits and vegetables into your diet? Write down ideas on how you can do this, and try it. How did you do?

"Little Tick, Big Trouble," pages 22–28

- How is the text in this article structured (question-answer, descriptive, compare-contrast) and why do you think so?

“The Uncommon Science Behind the Common Cold,” pages 30–31

1. How do the headings in this article help you understand the information?
2. How do the call-outs help you understand the article?
3. How do the special feature boxes in the article help you understand the information?

“Laugh Yourself Happy . . . and That’s No Joke,” pages 32–35

Mark the following statements true (T) or false (F). If false, provide the necessary correction.

1. ___ A man once relieved his pain by watching action movies.
2. ___ Laughter can help to increase betaendorphins, which act as a body’s own painkiller and mood booster.
3. ___ Hearty laughter decreases cortisol, epinephrine, and dopac, which are three destructive stress hormones.
4. ___ A healthy lifestyle can include a balanced diet, moderate exercise, and laugh-out-loud laughter.
5. ___ The process of laughing, with huge exhalations and inhalations, is an effective exercise, especially for people with nervous system problems.

“When Words Hurt,” pages 36–38

1. If you are being bullied, why is it a good idea to talk to a trusted relative, family friend, church leader, or guidance counselor?
2. How do hurtful words damage the brain?

“Get Your ZZZZZs!,” pages 39–40

1. How many hours of sleep does the average American teen need?
2. How much sleep do you get at night? Are you getting the sleep you need to function at your best?
3. Why do you think lack of sleep makes people more likely to feel down or depressed?
4. What are three reasons why today’s teens don’t get enough sleep?

“Brush Your Teeth: A Toothbrush Timeline,” pages 42–43

1. What kind of toothbrush do you like to use?
2. What is plaque? What is tartar?
3. Why is a timeline an effective tool to show the information in this article?

ANSWER KEY:

“Wrestling with Calories”

1. a traditional meat-and-vegetable stew
2. bulk and strength
3. Possible responses: excessive calories and slowed metabolic rates/by eating a lot and taking long naps
- 4.

Athlete	Sumo Wrestler	Distance Runner	Gymnast	Jockey
Physical Requirements	Bulk and strength	Sustained muscle activity	Brief, intense muscle power	Muscle tone, overall fitness
Diet	Excessive calories and slowed metabolic rates	Calories from carbohydrates	High proteins, low carbohydrates	Minimum required calories and fluids

5. Possible response: a healthy balance of carbohydrates, for sustained muscle activity, and protein, for brief, intense muscle power

“No One Above You!” and “Your Body at High Altitude”

1. Question-Answer format. Possible response: Q-A format helps me find specific information about the diet of an extreme climber. It helps me get to know the interviewee, Melissa Arnot, and find out what she is like as she answers specific questions.
2. Possible response: Melissa Arnot leads such an exciting life that the interviewer must have had other questions, perhaps about her favorite or most challenging climb. Though other questions may have been interesting, they may not have pertained to the article’s focus on food and diet and would have been left out.
3. “pant like a dog.” Possible response: The simile helps me understand what it feels like to be at a high altitude. I’ve seen a dog pant and I know what it feels like to be out of breath, so I can picture and understand what it must be like on an expedition.
4. Arnot allows her body to adapt to the thin air by climbing slowly, taking months to reach a high summit.

“Ten Reasons Why You Don’t Exercise”

1. Vigorous aerobic activity: An exercise that gets your heart beating faster; Muscle-strengthening activity: An exercise that uses weight to tone muscles; Bone-strengthening activity: An exercise that uses force or impact on the body to strengthen bones.
2. Possible response:

Vigorous Aerobic	Muscle-strengthening	Bone-strengthening
Jumping rope	Climbing monkey bars	Jumping rope
Climbing monkey bars	Lifting weights	Running

3. Responses will vary.
4. Responses may include: better overall fitness and health; stronger muscles and bones; stronger immune system; improved mood, focus, and decision-making skills

“On the Run . . . But Not Running on Empty”

Responses will vary but should include ways to include healthier snacks in the students’ diets and details on how successful the students were.

“Little Tick, Big Trouble”

Possible response: The article has a descriptive text structure as well as a question-answer section. The writer describes the various symptoms she experiences as related to her undiagnosed ailment. For example, she describes herself as “sluggish” and having “extreme

fatigue." She also describes the cause, symptoms, and treatment of Lyme Disease. For example, a bull's-eye skin rash is a characteristic symptom in a majority of Lyme disease patients. The question-answer section of the article offers specific answers to specific questions. It allows readers to get to know a girl with Lyme disease and learn about her day-to-day life. For example, Pomy rests during the day when she feels pain.

"The Uncommon Science Behind the Common Cold"

Possible responses:

1. The headings help focus my reading to help me read with a purpose. Because the headings are questions, I'm reading to find out answers to the questions about the common cold.
2. The call-outs help me understand vocabulary words that I may be unfamiliar with that are related to the common cold.
3. The feature boxes deliver clear information (especially with the bullet points) that is related to the topic of the common cold. The boxes help me understand how to protect myself from getting sick and how to ease symptoms.

"Laugh Yourself Happy . . . and That's No Joke"

1. (F) A man once relieved his pain by watching funny movies (and taking Vitamin C).
2. (T)
3. (T)
4. (T)
5. (F) The process of laughing, with huge exhalations and inhalations, is an effective exercise, especially for people with respiratory problems.

"When Words Hurt"

1. Possible response: It's a good idea to talk to someone you trust so you can let them know what is going on. Being silent won't make the bullying go away. With a trusted person's support, you can take control and take steps to stop the abuse.
2. Subjects who experienced verbal abuse as children were shown to have underdeveloped connections between the left and right sides of their brain, which may cause impairment.

"Get Your ZZZZZs!"

1. 9.2 hours
2. Responses will vary.
3. Possible response: Lack of sleep doesn't help you perform at your best. If you are not performing well and not getting good grades, that can bring you down. Also, if you are tired, you can't cope, and you can't look on the bright side
4. Use of electronic devices before bedtime is too stimulating; teens drink too much caffeine; teens naturally fall asleep later than younger children, but they have to get up earlier for school.

"Brush Your Teeth: A Toothbrush Timeline"

1. Responses will vary.
2. Plaque is a film of mucus and bacteria on the tooth surface. Tartar is a hard, yellowish deposit on your teeth that is formed when plaque calcifies saliva minerals.
3. Possible response: A timeline is effective because it highlights specific points in the history of the toothbrush. It takes thousands of years of history and pinpoints certain areas to make them visual and understandable.