

Activity Preparation for Chapter 10

Activity/Investigation	Advance Preparation	Time Required	Other Considerations
<i>Find Out: How Breathing Works</i> (page 193) (TR page xx)	<ul style="list-style-type: none"> • 3 to 4 days before <ul style="list-style-type: none"> – Gather the required apparatus and materials. • 2 days before <ul style="list-style-type: none"> – Stretch and inflate the small balloons. Leave them inflated for a day. Before giving them to students, deflate the balloons. • 1 day before <ul style="list-style-type: none"> – Organize materials into small containers. – Photocopy BLM 10–1 How Breathing Works. 	<ul style="list-style-type: none"> • 45 min 	<ul style="list-style-type: none"> • Some students may have difficulties understanding how the model is put together. BLM 10–1 How Breathing Works breaks down the steps for building the model.
<i>Find Out: Exercise and Breathing</i> (page 194) (TR page xx)	<ul style="list-style-type: none"> • 1 month before <ul style="list-style-type: none"> – Order bromothymol blue solution from a supplier. • 1 week before <ul style="list-style-type: none"> – Gather the required apparatus and materials. 	<ul style="list-style-type: none"> • 45 min 	<ul style="list-style-type: none"> • This is a teacher-led demonstration. • Caution volunteers not to suck any bromothymol solution into their mouth. Be careful when pouring bromothymol solution since it stains hands and clothes.
<i>Find Out: How Does Exercise Affect Blood Pressure?</i> (page 200) (TR page xx)	<ul style="list-style-type: none"> • 1 day before <ul style="list-style-type: none"> – Gather materials and equipment. – Read instructions supplied with equipment. – Do a test reading to familiarize yourself with equipment. – Photocopy BLM 10-2 Exercise and Blood Pressure, Master 1 Centimetre Grid Paper (optional), and Assessment Master 1 Cooperative Group Work Checklist. • Day of <ul style="list-style-type: none"> – Demonstrate equipment for students. 	<ul style="list-style-type: none"> • 45 min 	<ul style="list-style-type: none"> • You may decide to do the activity as a teacher-led demonstration and ask volunteers to participate. • Find out if any students have conditions that prevent them from participating in physical exercise. Assign such students to roles such as taking readings or timekeeping.
<i>Test It! Recovery Time!</i> (page 202) (TR page xx)	<ul style="list-style-type: none"> • 1 to 2 days before <ul style="list-style-type: none"> – Organize any sports equipment supplied by you or the Phys. Ed. dept., or brought from students' homes. – Obtain electronic monitors (if possible). • 1 day before <ul style="list-style-type: none"> – Photocopy BLM 10–3 Recovery Time Data Table (optional), Master 1 Centimetre Grid Paper (optional), and Assessment Master 13 Fair Test Checklist. 	<ul style="list-style-type: none"> • 45–60 min (time to brainstorm, plan, conduct, and do the wrap-up for the investigation) 	<ul style="list-style-type: none"> • Find out if any students have conditions that prevent them from participating in physical exercise. Assign such students to roles such as taking pulse readings or timekeeping.
<i>Try This!</i> (page 205) (TR page xx)	<ul style="list-style-type: none"> • 2 to 3 days before <ul style="list-style-type: none"> – Check that no students are allergic to the ingredients in soda crackers. – Buy unsalted soda crackers. • 1 day before <ul style="list-style-type: none"> – Book a room where eating food is permitted. • Day of <ul style="list-style-type: none"> – Double check that no students are allergic to ingredients in soda crackers. 	<ul style="list-style-type: none"> • 15–20 min 	<ul style="list-style-type: none"> • If students have allergies to ingredients in wheat crackers, consider using other starchy foods such as rice cakes.

Materials Needed for Chapter 10

Activity/Investigation	Apparatus	Materials	Blackline Masters
<i>Find Out: How Breathing Works</i> (page 193) (TR page xx)	<ul style="list-style-type: none"> scissors (1 per group) 	<ul style="list-style-type: none"> 500 mL plastic cups (1 per group) drinking straws (2 per group) small balloons (2 per group) small elastic bands (2 per group) modelling clay large balloons (1 per group) large elastic bands (1 per group) 	<p>Recommended BLM 10–1 How Breathing Works Assessment Master 16 Oral Presentation Rubric</p> <p>Optional BLM 10-2 Exercise and Blood Pressure</p>
<i>Find Out: Exercise and Breathing</i> (page 194) (TR page xx)	<ul style="list-style-type: none"> stopwatch small test tube 	<ul style="list-style-type: none"> bromothymol blue solution (approximately 5 mL for each test) 2 drinking straws 	
<i>Find Out: How Does Exercise Affect Blood Pressure?</i> (page 200) (TR page xx)	<ul style="list-style-type: none"> digital blood pressure cuff skipping rope (optional) manual blood pressure cuff (optional) stethoscope (optional) 	<ul style="list-style-type: none"> chart paper (optional) 	<p>Recommended Assessment Master 1 Co-operative Group Work Checklist Assessment Master 2 Co-operative Group Work Rubric</p> <p>Optional Master 1 Centimetre Grid Paper</p>
<i>Test It! Recovery Time</i> (page 202) (TR page xx)	<ul style="list-style-type: none"> sports equipment supplied by you, Phys. Ed. dept., or students method of taking pulse (e.g., stopwatch, electronic heart monitor if available) 	<ul style="list-style-type: none"> chart paper (optional) 	<p>Recommended Assessment Master 13 Fair Test Checklist Assessment Master 14 Fair Test Rubric</p> <p>Optional BLM 10–3 Recovery Time Data Table Master 1 Centimetre Grid Paper</p>
<i>Try This!</i> (page 205) (TR page xx)		<ul style="list-style-type: none"> unsalted soda crackers (2 per student) 	