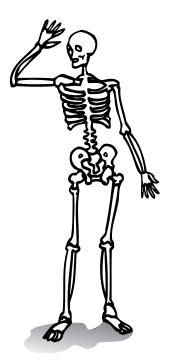
**Chapter Science Investigation** 

# **An Injury Survey**

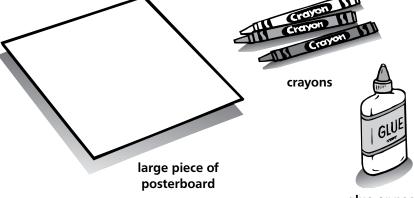
# WHAT YOU NEED



picture of a skeleton



picture of a young person wearing shorts and a T-shirt



glue or paste

#### **Find Out**

Name \_\_\_\_

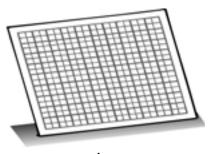
Do this activity to see what injuries your classmates have had and how the injuries happened.

#### **Process Skills**

Communicating Inferring Interpreting Data

#### **Time**

- 20 minutes the first day
- 20 minutes each day for two weeks



graph paper

## WHAT TO DO

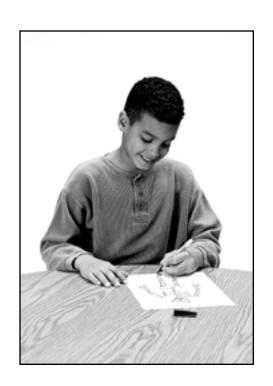


 Make a question sheet. Write your own questions but also use these questions:

Have you ever had a broken bone or a sprain? How did this happen? Have you ever had stitches because of an accident? How many? Where were they? How did this injury happen?

You may also ask where the accident happened, how old the person was when it happened, and how long the injury took to heal.

- **2.** Ask your teacher to make copies of your question sheet for each student in the class.
- **3. Survey** your classmates. Give each student a copy and ask him or her to answer the questions. Collect the surveys when your classmates have answered the questions.
- **4. Record** your findings. Above the name of each body part, color in one square for each injury.
- **5.** On the picture of a skeleton, **draw** a line to each broken bone, and **record** the number of students who have broken that bone.
- 6. On the picture of the young person, draw lines as before, but this time record the number of students who had injuries to that part of the body.



- **7.** List safety equipment that may have prevented each injury.
- **8.** Paste your graph and picture charts on the posterboard.

-						_				
		_		С	lassro	om In	juries			
-		8								
-		7								
		6								
-	Numbe of									
-	Studen	ts 4								
-		3								
-		2								
		1								
0		0	Arm	Leg	Ankle	Wrist				
-				Pai	rts of tl	ne Bod	y Injur	ed		

#### **Conclusions**

- 1. What part of the body had the most injuries?

  Answers will vary, but injuries related to the head, arms, and ankles are most probable.
- **2.** What were students doing when the injuries occurred? Responses will vary.

#### **New Questions**

**1.** What part of the body is injured most by those who play sports?

Answers will vary, but accept any of the following responses: leg and bone fractures, ankle and wrist sprains, and the dislocation of two bones as in a shoulder dislocation.

**2.** Think about the injuries that your classmates have had. What kinds of safety equipment should they use to help prevent injuries?

Answers will vary. Possible answers: helmets to protect against head injuries; shin guards and knee pads to prevent bruises and sprains; wrist guards and elbow pads to prevent bruises and sprains.

**3.** What kinds of safety equipment would you take on a camping trip?

Answers may vary, but may include a first aid kit including medicines, blankets, wrapping tape, materials for splints, and a cellular phone.



Name	





# **Modeling Air Bags**

What do you **predict** will happen when an egg is tossed on the center of the sheet?

Answers will vary. Some students may think that the egg will bounce but not break.

Take turns gently tossing the egg onto the center of the sheet. **Record** what you **observe** in the chart.

Name	What Happened

#### **Activity Journal**

Lesson 1 • Avoiding Injuries

Name	

#### **Conclusions**

Does the egg break when it lands on the sheet? Why or why not?

The egg doesn't break because the sheet cushions it.

Would it break if it fell on the floor? Why or why not?

The egg would break if it fell on the floor because the floor provides no cushioning.

## **Asking New Questions**

- What happens when the sheet is pulled tighter? The egg bounces.
- What happens when the sheet is held loosely? The egg sinks toward the floor.
- What happens when the egg is thrown harder? The egg may crack and break.
- How is the sheet like an air bag?

  The sheet cushions the egg and prevents it from being broken, just as an air bag cushions a passenger and prevents her or him from being injured.
- What does the egg represent? The egg represents a car passenger.

Name \_\_\_\_\_





# **Making a First Aid Kit**

**List** the things that can be used to treat small injuries on the card below. Title the list *First Aid Kit*.

Then, cut out the card and place it inside the bag.

#### **Activity Journal**

Lesson 2 • Basic First Aid

Name
------

#### **Conclusions**

Explain what each item is for.

Pads can be used to apply pressure to a bleeding wound. Bandages are used to cover a wound and to keep it clean. Tape can be used to secure a bandage. Gloves are used to protect a caregiver's hands.

What else could you put in your kit?
Students might suggest adding antiseptic swabs, cotton balls, and other medical items.

Why is a zipper plastic bag a good thing to use for making a first aid kit?

The bag can be sealed shut so that contents will not fall out or become soiled.

# **Asking New Questions**

Name places where you might find a first aid kit.

Answers may include: home, school, school bus, car, boat, bike pack, purse, locker room.

What kinds of workers might need a first aid kit nearby?

most likely, workers who use tools or operate machinery.

- How is packing a first aid kit like packing a suitcase?

  Only needed things are packed.
- Where are some good places for people to keep first aid kits?

in a car, at school, at home, and at work; in a backpack or purse

Name \_\_\_\_\_





# **Dialing 911 for an Emergency**

**Write** three or four questions that a 911 operator might ask.

1.	Possible answers may include: What is your name? Where are you? What is wrong? When did the accident happen?
2.	you. What is wrong. Whom are the acordon happon.

3.

4.

**Make a list** of things to tell the 911 operator.

Your Name:

Your Address:

Your Telephone Number:

What Happened:

What happened when the person talked too fast to the 911 operator?

Students may find that they can't understand the person or that they can't record the information fast enough.

#### **Activity Journal**

Lesson 3 • Emergency Care

Name	

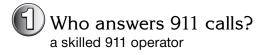
## **Conclusions**



When people are excited and scared, are they calm? Usually they are not.

Why is it important to stay calm in an emergency?
Staying calm during an emergency helps you to take care of an injured person and to get proper help.

## **Asking New Questions**



What does the person who answers a 911 call do if he or she cannot understand the caller?

Most likely the person asks the caller to slowly and calmly repeat the information.