Name: _____ Group: _____ Date: _____

BONDS, WEAK AND STRONG

STUDENT BOOK:	**Chapter 12, pp. 385–388**
CONCEPTS:	LINKING OF MECHANICAL PARTS
METHOD:	OBSERVATION

Most technical objects are made of several components linked together in various ways. Many objects, including tools and drafting instruments, must make certain movements in order to fulfill the function for which they were designed. In this activity, you will learn to recognize the main types of links between the components of ordinary technical objects.

IDENTIFYING THE OBSERVATION CRITERIA

Read pp. 385–388 in your student book for help in answering questions 1–5.

1. What is a link in a technical object?

_____

_____

_____

_____

2. What determines the type of link?

_____

_____

_____

_____

3. Complete the table on the next page.

a) Name six types of links.

b) For each type of link, check the type of motion that the guided part can make.

c) For each type of link, check how many axes are involved in the motions.

Name: _____ Group: _____ Date: _____

Links and their motions

Type of link	Type of motion			Axis	
	Rotational	Translational	Helical	One axis	Several axes
_____					
_____					
_____					
_____					
_____					
_____					

ESTABLISHING AN OBSERVATION PROTOCOL

4. In observing the objects or pictures supplied, indicate how you will identify the type of link connecting the parts.

_____

_____

_____

_____

_____

APPLYING THE OBSERVATION PROTOCOL

5. Complete the table on the next page based on your recorded observations.

a) In the left-hand column, record the name of the technical object observed.

b) For each technical object observed, record in the middle column a type of link that you find in that object. More than one type of link may be observed for certain objects.

c) In the right-hand column, record the parts of the technical object connected by the type of link you found.

Name: _____ Group: _____ Date: _____

Parts and their links

	Technical object	Type of link	Linked parts
A			
B			
C			
D			
E			
F			
G			
H			
I			
J			
K			

Name: _____ Group: _____ Date: _____

REFLECTING ON YOUR APPROACH

6. Did the observation protocol help you recognize the different types of links used in technical objects?

7. Which object contained the link that was most difficult to identify? Why?

8. How could you improve the observation protocol for recognizing the types of links used in technical objects?