

Name:

Date:

Homework: Link Characteristics and Guiding Controls

1. Identify the characteristic of the links described in the statements below.

- a) characteristic of a link when the linking component or the surfaces of the linked parts are rigid

RIGID

- b) characteristic of a link when at least one part can move independently of the other parts

PARTIAL

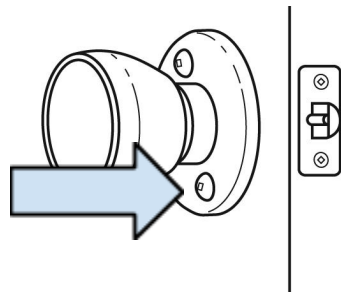
- c) characteristic of a link in which the separation of the linked parts damages their surfaces or the linking component

NON REMOVABLE

- d) characteristic of a link that requires a linking component

INDIRECT

2. Consider the link below between the doorknob and the door.

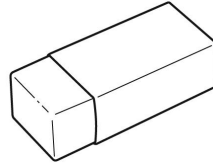


- a) Identify the characteristics of this link by checking the correct boxes.

direct	<input type="checkbox"/>	indirect	<input type="checkbox"/>
rigid	<input type="checkbox"/>	flexible	<input type="checkbox"/>
removable	<input type="checkbox"/>	non-removable	<input type="checkbox"/>
complete	<input type="checkbox"/>	partial	<input type="checkbox"/>

- b) On the figure, draw an arrow that points to a linking component, if there are any.

3. Consider the link between the eraser below and the plastic-coated paper covering it.



- a) Identify the characteristics of this link by checking the correct boxes.

direct	<input type="checkbox"/>	indirect	<input type="checkbox"/>
rigid	<input type="checkbox"/>	flexible	<input type="checkbox"/>
removable	<input type="checkbox"/>	non-removable	<input type="checkbox"/>
complete	<input type="checkbox"/>	Partial (arguable)	<input type="checkbox"/>

- b) On the figure, draw an arrow that points to a linking component, if there are any.

None

4. True or false?

- a) Glue usually plays the role of a linking component in a technical object.

True

- b) A link can be both partial and flexible.

True

5. Identify the form of guiding described in the following statements.

- a) form of guiding that allows a moving part to turn on itself

rotational

- b) form of guiding that allows a moving part to move in a straight line

Translational

- c) form of guiding that allows a moving part to rotate while moving sideways along its rotational axis

helical

6. Which form of guiding makes the following actions possible?

- a) exposing the blade of a retractable utility knife

translational

- b) using a paint roller

rotational

- c) pressing the keys of a computer keyboard

translational

- d) opening and closing a tap

helical

- e) opening a classroom door

rotational

- f) opening a patio door

Translational or rotational (depending on the type of patio door)

- g) opening a compact disk case

Rotational

7. Which form of guiding control is usually found in an object when the guiding component . . .

- a) has threads?

Helical

- b) has grooves?

translational

- c) is cylindrical?

Rotational
