

Pre-Assessment

Name _____

Date _____

What do you think assistive and adaptive technology is?

Who do you think might use it, and why?

Activity: Loss of opposable thumb

Name _____

Date _____

With assistance of a classmate, tape your thumbs down against the palms of your hands. Try to complete the following tasks. Rate the difficulty of each activity.

	Not at all difficult			Very difficult	
	1	2	3	4	5
Pick up a penny.					
Open and close a zipper.					
Button a button.					
Open a child-proof bottle.					
Tie a shoe.					
Sweep the floor.					

Of the above activities what did you find most difficult to do? Explain why?

What did you find least difficult? Explain why?

Activity: Eyesight impairment

Name _____ Date _____

Put on the vision impairment glasses BEFORE uncovering the items on the table.

The envelope on the table contains a puzzle. Please remove the pieces from the envelope and try to piece the puzzle together correctly to form a picture.

Rate the difficulty of each of these activities.

Read medicine bottle	1	2	3	4	5
Read book	1	2	3	4	5
Read poster	1	2	3	4	5
Read eye chart	1	2	3	4	5
Put puzzle together.	1	2	3	4	5

Of the above activities what did you find most difficult to do? Explain why?

What did you find least difficult? Explain why?

With the assistance of a classmate, read the eye chart. What is the smallest line you were able to read? What is the level of vision associated with that line?

Before leaving the table, please shuffle the puzzle pieces and return them to the envelope. Make sure everything is back in its place, and the items are covered / placed face down.

Activity: Eyesight impairment: *Multiple glasses*

Name _____ Date _____

Put on one pair of vision impairment glasses BEFORE uncovering the items on the table.

One at a time, pick up objects and try to read them.

The envelope on the table contains a puzzle. Please remove the pieces from the envelope and try to piece the puzzle together correctly to form a picture.

Rate the difficulty of each activity. Be sure to find the column with a label matching the one on your glasses.

Impairment glasses:	A					B					C								
	Least dif.					Most dif.													
Read medicine bottle	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5				
Read book	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5				
Read poster	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5				
Read eye chart	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5				
Put puzzle together.	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5				

With the assistance of a classmate, read the eye chart. What is the smallest line you were able to read? What is the level of vision associated with that line?

Impairment glasses: _____ A _____ B _____ C _____

Repeat above procedure for each set of vision impairment glasses.

Of the above activities what did you find most difficult to do? Explain why?

What did you find least difficult? Explain why?

Using the letters on the glasses, rank the 3 pairs in order.

- ___ Mildly impaired vision
- ___ Moderately impaired vision
- ___ Severely impaired vision

Before leaving the table, please shuffle the puzzle pieces and return them to the envelope. Make sure everything is back in its place, and the items are covered.

Activity: Wheelchair

Name _____ Date _____

Please set the brakes on the chair before getting in or out of it. This is important for your own safety and that of others around you. Once seated, you may release the brakes.

It is important that you use only appropriate, safe behavior in this activity. If you have any questions regarding this, please speak with your teacher BEFORE continuing the activity.

Sit in the wheelchair. During this activity, you are not allowed to move or use your legs or feet in any way. Before attempting the tasks below, you may take 60 seconds to practice maneuvering in the chair. Be sure to stay within the boundaries set by your teacher.

Rate the difficulty of each activity below.

	Not at all difficult			Very difficult	
Retrieve the item on the shelf.	1	2	3	4	5
Retrieve the item on the floor.	1	2	3	4	5
Carry each bulky item.	1	2	3	4	5
Carry the cup of water without spilling.	1	2	3	4	5

Of the above activities what did you find most difficult to do? Explain why?

What did you find least difficult? Explain why?

Before leaving this station, please make sure items are back where they belong for the activity.

Activity: Using crutches

Name _____ Date _____

It is important that the crutches are used in a safe and responsible manner. Please stay within the boundaries set by your teacher for use of the crutches.

If you need to adjust the height of the crutches, please double check that all screws are tightened VERY securely before using them.

To avoid injury, users should not put their armpits on the crutch pads, but should instead support their weight with their hands. If you have any questions about crutch safety, please address them with your teacher BEFORE continuing this activity.

Before attempting the tasks below, you may take 60 seconds to practice maneuvering with the crutches. Please be sure to stay within the boundaries set by your teacher.

Rate the difficulty of each activity below.

	Not difficult			Very difficult	
	1	2	3	4	5
Carry one book.					
Carry three books.					
Carry a suitcase.					
Carry a cup of water without spilling.					

Of the above activities what did you find most difficult to do? Explain why?

What did you find least difficult? Explain why?

Activity: Crutches, wheelchairs and your own two feet Instruction Sheet

It is important that the wheelchairs and crutches are used in a safe and responsible manner. Please stay within the boundaries set by your teacher for use of the wheelchairs and crutches.

Please set the brakes on the chair before getting in or out of it. This is important for your own safety and that of others around you. Once seated, you may release the brakes.

If you need to adjust the height of the crutches, please double check that all screws are tightened VERY securely before using them.

To avoid injury, users should not put their armpits on the crutch pads, but should instead support their weight with their hands.

If you have any questions about safety with the wheelchair or the crutches, please address them with your teacher BEFORE continuing this activity.

If you have not tried them already today, you may have up to 60 seconds to practice moving about using the wheelchair or crutches before attempting the tasks below.

Please remember that this is NOT a race. You are not comparing your performance to that of your classmates. You are comparing the three modes of mobility. The walker must have at least one foot on the ground the entire time. If at any point the walker has both feet off the ground, the round will not count for that student.

The teacher has set up a course to be completed by three classmates simultaneously. If there is enough time, you may opt to complete the course more than once, using a different mode of mobility each time.

Along the course, you will see three pieces of paper on the wall. From each of these papers, you are to take ONE sticky note. At the end of the course, all three students' times should be marked on EACH student's worksheets. (Space has been left to record additional, optional trials.)

As you return to the starting point, please return the sticky notes to their places on the three papers along the course.

Assistive and Adaptive Devices – Post activity Assessment Reflection Sheet

Name _____ Date _____

Part A

For each of the disabilities modeled in class, name at least two of your everyday activities that would change significantly or be virtually impossible to participate in.

1. Missing thumbs

- a.
- b.

2. Impaired eyesight

- a.
- b.

3. Mobility impairment requiring use of a wheelchair

- a.
- b.

4. Mobility impairment requiring use of crutches

- a.
- b.

Part B

1. Choose one of the activities you identified above. What modifications or assistive device would make you more able to complete this activity?

2. Do you think this modification or assistive device would be easy to provide?

3. Do you think your solution could be used for other purposes or activities?

If so, what?

If not, why not?

4. Do you think a lot of people might benefit if this solution were available to them?