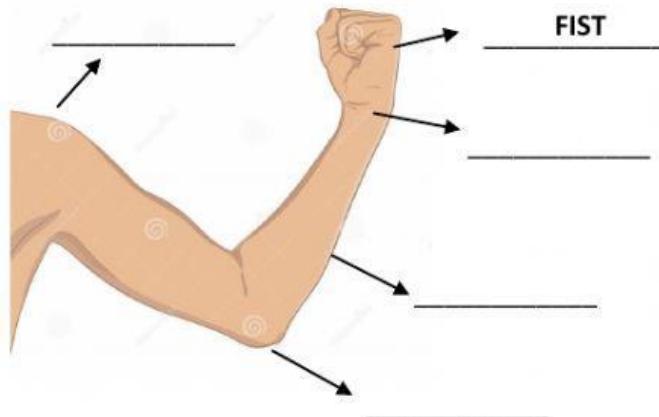
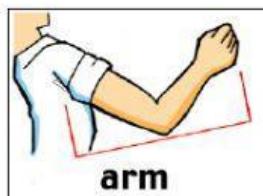




Lesson 3

ACTIVITY 1: Label the diagram with the following words: **elbow, fist, wrist, forearm and shoulder.**



ACTIVITY 2: Read this text and mark the sentences true (T) or false (F).



The human arm can move in seven different directions. The arm has three pivots: the wrist, the elbow and the shoulder. The wrist can move in three different directions. At the wrist, the hand can move up and down about 90° , it can move from side to side about 70° , and it

can rotate about 180° . The shoulder can move in the same three directions, but different angles. It can rotate about 20° . The elbow can only move in one direction. At the elbow, the forearm can only move up and down. It cannot move sideways or rotate.

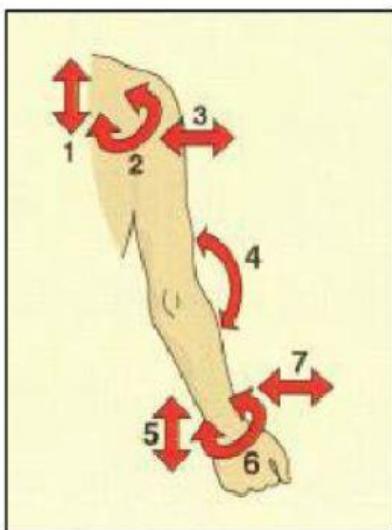
1. The wrist can only move up and rotate.
2. The shoulder can't rotate.
3. The elbow can move in one direction.
4. The forearm can rotate.
5. The arm has three pivots.
6. At the wrist, the hand can rotate about 20° .

TRUE	FALSE

ACTIVITY 3: Match the halves to make sentences.

1 The forearm can move	a move sideways or rotate.
2 The arm has	b in three directions.
3 The elbow can move in	c three pivots.
4 The arm can	d one direction.
5 The forearm can't	e up and down.
6 The wrist can move	f move in seven directions.

ACTIVITY 4: Look at the picture and choose the correct movement for each number.



1.

rotate	move sideways	move up and down
--------	---------------	------------------
2.

rotate	move sideways	move up and down
--------	---------------	------------------
3.

rotate	move sideways	move up and down
--------	---------------	------------------
4.

rotate	move sideways	move up and down
--------	---------------	------------------
5.

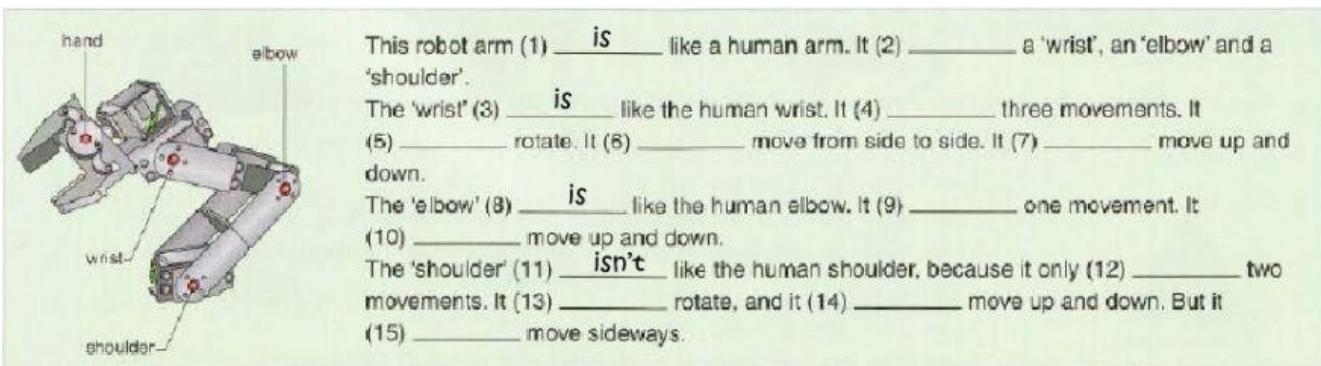
rotate	move sideways	move up and down
--------	---------------	------------------
6.

rotate	move sideways	move up and down
--------	---------------	------------------
7.

rotate	move sideways	move up and down
--------	---------------	------------------

ACTIVITY 5: Complete the text with the words from the box.

can can't has



Be like: es como

The robot arm is like the human arm = The brazo robótico es como el brazo humano.

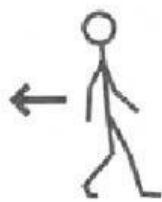
ACTIVITY 6: Read the text about the robot arm again. Are the sentences **True** or **False**?

1. The robot arm has three pivots.
2. The wrist can rotate.
3. The elbow can't move.
4. The shoulder has one movement.
5. The shoulder has three movements.
6. The shoulder can rotate and move up and down.

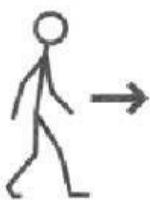
ACTIVITY 7: Match the pictures with the movements.



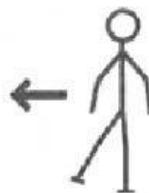
FORWARDS



SIDEWAYS



BACKWARDS



DOWN

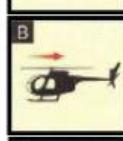


UP

ACTIVITY 8: Match the pictures with the instruction below.



1 Fly diagonally down.



2 Fly forward.



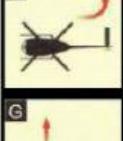
3 Fly straight up.



4 Reverse.



5 Rotate on a vertical axis.



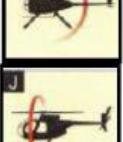
6 Reverse to the left.



7 Turn left.



8 Rotate on a horizontal axis.



9 Turn right.

10 Reverse to the right.