

# chapter 3

## Tools and Materials

### General Aims:

This chapter is designed to introduce tools , hand tools and materials of carpet-weaving and help students learn a number of technical and general word used in handmade carpets texts, and promote their comprehension in these texts.

## Behavioral Objectives

After carefully reading this chapter, you are expected to:

- ١ Define the meaning of the words presented at the beginning of this chapter.
- ٢ Name the carpet weaving tools.
- ٣ Talk about using any tools.
- ٤ Talk about the name of raw materials in carpet weaving.
- ٥ Describe each material's features.
- ٦ Describe the two common techniques for dyeing.
- ٧ Do Exercises ٣, ١ Vocabulary Exercises. (A,B,C,D)
- ٨ Do Exercises ٣, ٢ Answer the Questions. (A,B,C,D)

## Vocabulary Help

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### A: Words Definitions and Exemplifications

**beam \_\_\_\_\_ n.**

wood or metal cylinder in a loom where the warp is wound / column

*The loom doesn't move because the horizontal beam holds it in place.*

**hammer(ing) \_\_\_\_\_ v:**

to beat / to hit in a very forceful way

*The typist was hammering the keys by fingers.*

**grapnel \_\_\_\_\_ n.**

Something curved use to hold another thing / hook

**loom \_\_\_\_\_ n.**

a frame or machine for weaving cloth or carpet

*Textiles were traditionally produced on large looms.*

**pile \_\_\_\_\_ n.**

a soft surface made by the ends of many short threads on a carpet / threads

*The rug has a thick pile.*

**spinning v.**

to make cotton, wool, etc into thread by twisting it /twist fibre into yarn

*Traditional crafts included spinning, weaving, and dyeing cotton for clothes.*

**twine v.**

to made strong yarn of more length string twisted together / twisted together

*Weaver twines the different colorful threads together.*

**warp n.**

the threads on a loom over and under which other threads (the weft) are passed to make cloth

*The warps run vertically around the loom.*

**weft n.**

the threads that run from side to side on a loom or in a woven fabric

*The pile is formed by knots round the warp threads, and held in place by the weft.*

**B: Find the meaning of the words from Dictionary**

beam	
grapnel	
hammering	
loom	
pile	
warp	
spinning	
weft	

## GET READY

**loom** is wooden or metallic in the shape of square or rectangular.



**Spindle** is used when we are spinning wool by hand.



**silk** is material that is gathered from the silkworm.



## “The Introductions of Tools and Materials”

We need different tools such as **Comb, scissors, knife, loom, hook** to produce a handmade carpet. Therefore quality and type of tools are very important.

The most important tool in carpet weaving is the loom. Loom is a wooden or metallic frame in the shape of square or rectangular. Each loom has two horizontal beams. The upper **beam** is called “Sardar” (upper beam) and the other in lower part called “Zirdar” (lower beam). There are two type of loom; Horizontal loom and Vertical loom.

**Horizontal** loom consists of two **beams** which holds the warps while the carpet is being made. Nomads mainly use horizontal looms . They are easily rolled up and put up at campground.



Vertical loom has four beams on the sides. These kind of looms are used in villages and at workshops.



Comb is an instrument to hammer carpet. It has teeth similar to comb with

wooden or metallic handle. Weaver uses comb to tie the knots and the weft after every row has been woven. The size of comb is different. There are various kind of thick and thin. It depends on the kind of carpet that weaver weaves.



Scissors are used for cutting the pile on the carpet after one or more rows have been tied.



A knife with a grapnel on bottom, is used for carpet weaving. It has a handle, blade and hook. The handle is used to hold warps. Hook is used to pass horizontally weft through back and forth warps then, slowly pull it toward the edge of the loom. we cut piles by blade of knife.



**Spindle** is used when we are spinning wool by hand. When we are rotating

the wool, It is **twined** into yarn. The spinning is done in different ways depending on the usage of warp, weft or pile. The nomadic women still use a traditional spindle to spin the yarn.



## Raw Materials

The high quality of raw materials is very important factor. Silk, cotton, wool and animal hair are animal or plant fibres.

Wool is the most important material in the carpet making process. The quality of wool changes with the animal age and life conditions. It also depends on the area and the time of shearing wool. The best wools are those that shear in the spring.



**silk** is another kind of materials that is gathered from the silkworm material. Silk is used for warp, weft and pile. Some carpets have the warp of silk and pile of wool. This fiber is very shiny. It affects the cost and value of rugs.



**Cotton** fibre is the most famous vegetable fibre. It is used in the textile industry. Cotton is stronger than wool. Warps and wefts are mainly made of cotton, but it can not be used for piles of carpet.



Exercises ۳, ۱

**A: Match the words in column A with their definition in column B**

A	B
loom	a wooden frame
pile	to beat
grapnel	column
hammering	twist fiber into yarn
twine	threads
pillar	twisted together
spin	hook



# Reading Comperhension

## part two: Vocabulary Exercise

**B: Fill in the blanks with the correct forms of the words given below**

beam   pile   looms   hammering   warp and weft

- ١ The ..... and ..... are the basic parts of all textiles.
- ٢ The typist's fingers were ..... the keys.
- ٣ It looks like fine Persian carpets with a velvety .....
- ٤ The tribes weave their traditional colorful clothing on homemade .....
- ٥ The kitchen has a tiled floor because of roof .....

**C: Read the passage and fill the blanks with the correct words**

- ١ There are two type of ..... horizontal and vertical.
- ٢ Warps and wefts are mainly made of .....
- ٣ ..... fibre is the most famous vegetable fibre.
- ٤ Some carpets have the warp of ..... and pile of wool .
- ٥ The quality of ..... changes with the animal age and the life conditions.
- ٦ Weaver uses ..... to tie the knots and the weft after every row has been tied.

## D: Circle the correct answers (sentence with the same meaning)

۱ When we are rotating the wool, it is twined into yarn.

- a) When we are rotating the yarn, it is twined into wool.
- b) When we are rotating the wool, it is pile of carpet.
- c) The wool twisted together When we are rotating it into yarn.

۲ Each loom has two horizontal beams. The upper beam is called “Sardar” and the other in lower part called “Zirdar”

a) loom has two Vertical beams. The upper Vertical beam is called “Sardar” and the other in lower part called “Zirdar” .

b) Each loom has two horizontal beams. “Zirdar” is the upper beam ,”Sardar” is the other in lower part “ .

c) Each loom has two horizontal beams. “Sardar” is the upper beam , “Zirdar” is the other in lower part “ .

۳ Hook is used to pass horizontally wefts through back and forth warps.

- a) Hook is used to pass horizontally warps through back and forth Wefts.
- b) Hook is used to weave horizontally wefts through back and forth warps.
- c) Wefts pass horizontally through back and forth warps by hook.

## part three: Answer the questions

Exercises ۳,۲

### A: Read the passage and answer the questions

۱ How many types of looms do we know?

۲ Does the quality of wool change?

۳ Which tool is used when the wool twined into yarn?

٤ Why comb is used in carpet weaving?

٥ Can cotton be used for piles of carpet?

### B: True and False

١ Cotton is a animal fiber.

٢ Hook is used to pass horizontally weft through back and forth warps.

٣ Nomads mainly use Vertical loom.

٤ Scissors are used for cutting the pile on the carpet.

٥ Silk is used for warp, weft and pile.

	١	٢	٣	٤	٥
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### C: Divided the words in to two groups.( add some new words in these groups)

comb   scissors   knife   loom   hook   silk   cotton   wool

Group ١	Group ٢
Tool	material
knife	wool

## D: Yes or No



cotton can be used for piles of carpet.



Comb is an instrument to hammer carpet.



When we are rotating the wool by spindle, wool is twined into yarn.