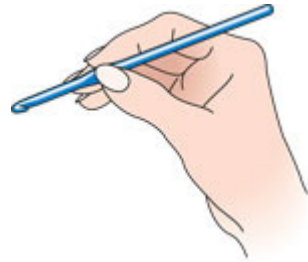# Learn To Crochet

These instructions will guide you in crochet so that you can make a crochet atom for The Perovskite Project.  The instructions were provided by http://www.redheart.com and by June Gilbank of PlanetJune www.PlanetJune.com
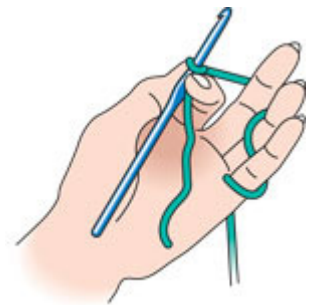
## Holding the yarn and hook

There are no hard and fast rules about the best way to hold the hook and yarn. Choose whichever way you find the most comfortable.
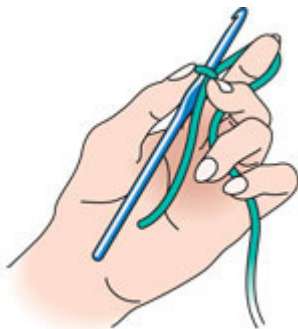
Some people prefer the "pencil grip". The hook is held in the right hand as if holding a pencil.

Some people prefer using the "knife grip". The hook is held in the right hand as if holding a dinner knife ready to cut.
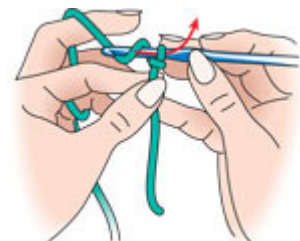
To maintain the slight tension in the yarn necessary for easy, even stitches, you may find it helpful to wrap the yarn around the fingers of the hand opposite the one holding the hook. Try one of these ways, or find another way that feels comfortable to you.

In the illustration to the left, the left hand holds your crochet work and at the same time controls the tension of the yarn. The left-hand middle finger is used to manipulate the yarn, while the index finger and thumb hold on to the work.
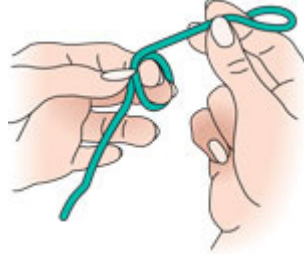
Some people find it more comfortable to manipulate the yarn with the index finger and hold the project with their thumb and middle finger. While you're learning, if one ways feels awkward, try another way until you find the one that suits you.
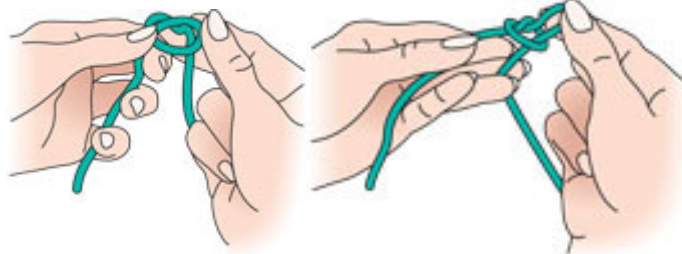
## Foundation Chain

Almost all crochet begins with a base or foundation chain, which is a series of chain stitches beginning with a slip knot.
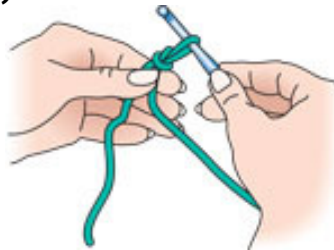
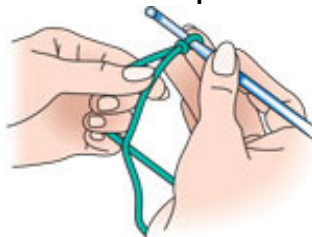(1) Make a circle with yarn or thread.

(2,3) Pull a loop through the circle.
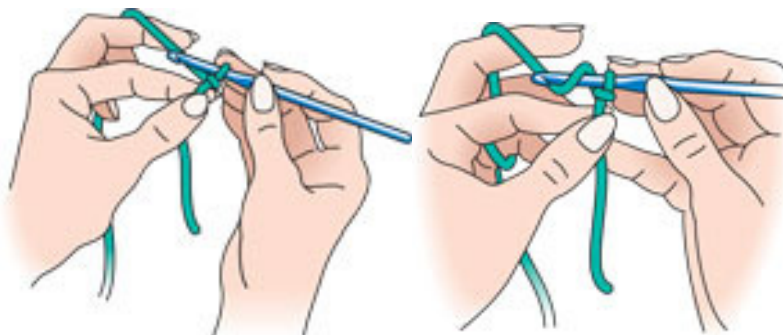
(4) Insert the hook in the loop.

(5) Pull gently and evenly to close the loop and slide the knot up to the hook.

## Yarn Over

Wrap the yarn from back to front over the hook (or hold the yarn still and manoeuvre the hook). This movement of the yarn over the hook is used over and over again in crochet and is usually called "yarn over", abbreviated as "yo".
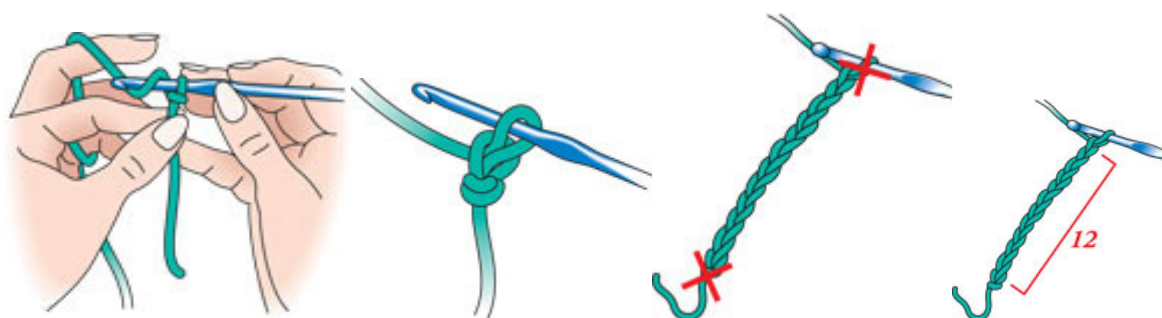
## Chain Stitch

The chain is used as a base to build stitches into in piece of crochet. Usually one stitch is worked into each of the chains although this can vary according to the pattern. Sometimes more than one stitch is worked into a chain or chain stitches are missed out.

Chain stitches are also used to create height at the end of the row to make sure the crochet stays straight at the sides. You can see this happen where you are told to chain 1 stitch then start crocheting into the stitch next to the new chain stitch.

Yarn over and pull the yarn through the loop already on the hook to form a new loop. Be careful not to tighten the previous loop.
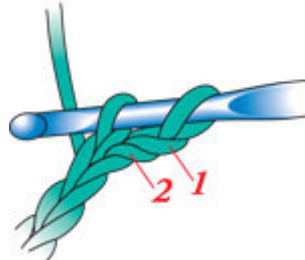
Repeat to form the number of chains specified in the instructions. Do not count the slip knot as a stitch.
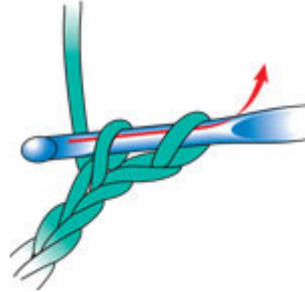
## The Double Crochet Stitch

This stitch is the simplest crochet stitch.  Confusingly it is called Double crochet in Europe and Single crochet in America.  They are the same thing though so make sure when you are reading a pattern you know where it has come from.
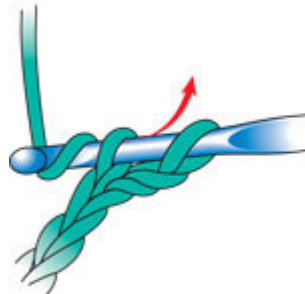
(1) Insert the hook into the work (second chain from hook on the starting chain), * yarn over and draw yarn through the work only.

(2) Yarn over again and pull the yarn through both loops on the hook.
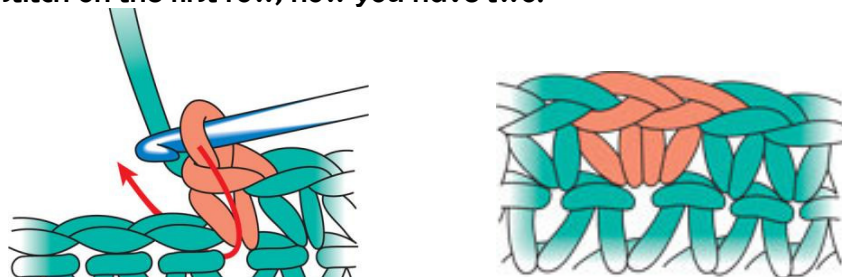
(3) One dc made. Insert hook into next stitch; repeat from *.
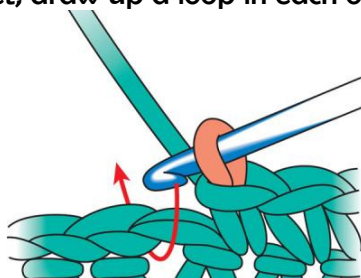
## Crochet Increases

To increase the width of a basic crochet fabric, 2 or more stitches have to be worked into 1 stitch at the point specified in the project instructions. Make one double crochet stitch as normal. Then work a second double crochet stitch into the same place – this means where you had one stitch on the first row, now you have two.

## Crochet Decreases
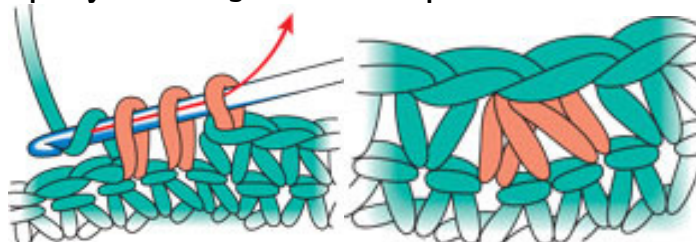
To decrease the width of a basic fabric, 2 or more stitches have to be worked together, by leaving the last loop of each stitch on the hook then working them off together. Double crochet stitches can be decreased in this way, called dc2tog.

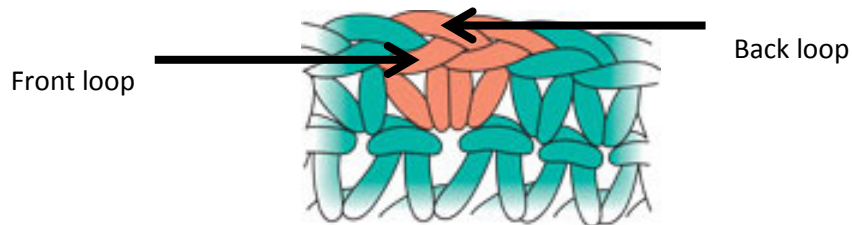(1) To decrease in double crochet, draw up a loop in each of the next 2 stitches,

(2, 3) Yarn over and pull yarn through all three loops on the hook.

## Invisible Decrease Method

This is another method for decreasing stitches without leaving little holes or lumps in your crochet. It is called the "invisible decrease" and requires you to insert the needle into one part of the stitch only instead of through the whole stitch. When this method is referring to "loops" it means this part of the stitch:

Front loop

Back loop

Insert the hook into the front loop of the first stitch (2 loops on hook).
**DO NOT YARN OVER**

Insert the hook into the front loop of the next stitch. To do this, you'll need to swing the hook down first so you can insert the hook *under* the front loop. (3 loops on hook):

*Swing hook down...*

*...then up through the front loop of the next stitch*

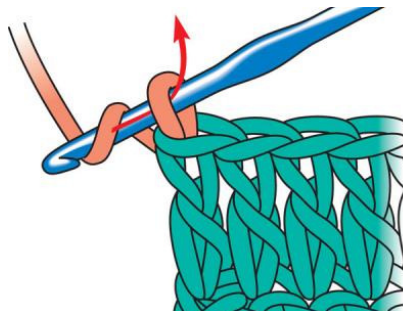Yarn over and draw through the first two loops on the hook. (2 loops on hook):



Yarn over and draw through both loops on the hook. Invisible decrease completed:



## Fasten Off

To fasten off the yarn permanently, cut the yarn leaving an 8" end (longer if you need to sew pieces together). Pull the end of the yarn through the loop on the hook and pull gently to tighten.

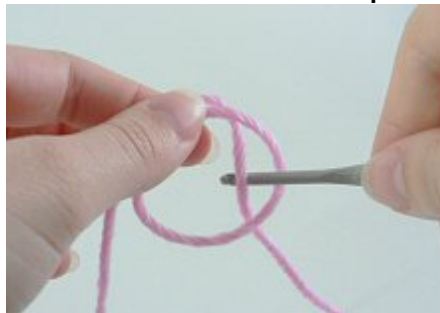## Crocheting in circles – the magic ring technique

In order to crochet a sphere, you need to crochet in a circle instead of in a straight line. The easiest way to do this is to use something called a "magic ring" which enables you to make stitches in a circle and then pull the ring like a drawstring to bring those stitches around and close the hole in the middle.

*Please note: in the following photos, the starting yarn tail is always on the left and hanging down. The working yarn begins on the right and is then picked up over my left forefinger in Step 2.*

1.     Make a loop a few inches from the end of your yarn. Grasp the join of the loop (where the 2 strands of yarn overlap) between your left thumb and forefinger:
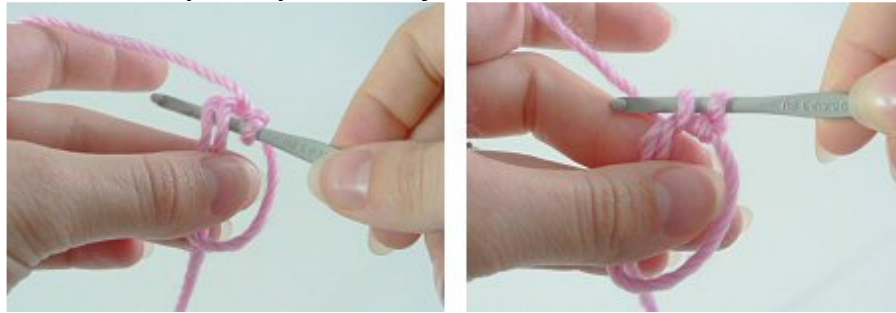
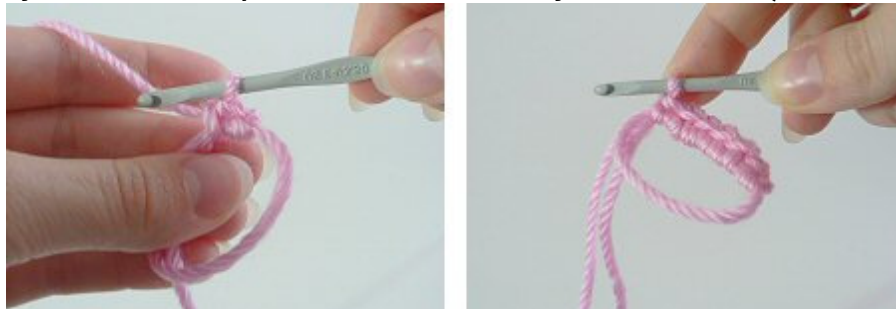2.     Insert hook into the loop from front to back. Draw up a loop:

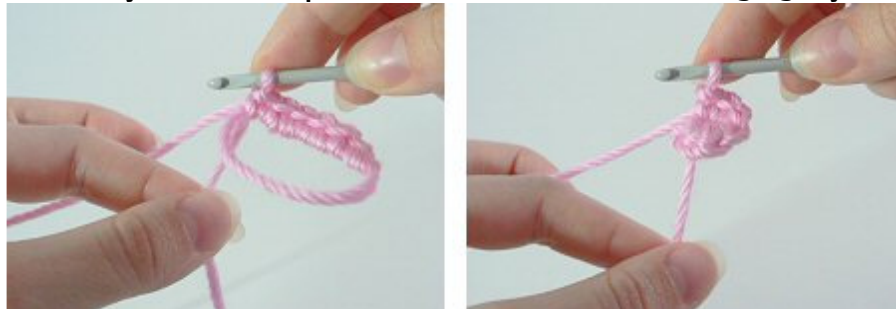3.     Chain 1 stitch. Note: this does NOT count as a stitch:

4.      Insert hook into the loop, so you are crocheting over the loop **and** the yarn tail. Draw up a loop to begin your first double crochet stitch:

5.      Complete the double crochet stitch. Continue to crochet over the loop and the yarn tail until you have the required number of dc for your first round (6 dc shown here):

6.      Grab the yarn tail and pull to draw the centre of the ring tightly closed:

7.      Begin your second round by crocheting into the first stitch of the first round (below, left). At the end of round 2 your work will look like this (below, right):

There are other ways to crochet in circles such as making a chain of stitches in a straight line and then joining them together but this magic ring method is by far the easiest and doesn't leave gaps in your ball.

## Abbreviations

Listed below are standard abbreviations and symbols that you may find in crochet patterns. If a pattern contains unusual combinations of stitches, these will be explained in the Special Abbreviations section at the beginning of the pattern.

**beg** .... begin(ning)

**bet** .... between

**blk** .... block

**CA, CB, CC, etc** .... Color A, Color B, Color C, etc.

**ch(s)** .... chain(s)

**cm** .... centimeter(s)

**dec** ..... decrease

**dc** .... double crochet

**dtr** .... double treble

**hdc** ....  half double crochet

**inc** .... increase

**lp(s)** ....loop(s)

**mm** .... millimeter(s)

**rep** .... repeat

**rnd(s)** .... round(s)

**RS** .... right side

**sk** .... skip

**sl** .... slip

**sp(s)** .... space(s)

**st** .... stitch(es)

**tog** .... together

**tr** .... treble

**WS** .... wrong side

**yo** .... yarn over* or ** ... repeat whatever follows the * or ** as indicated

[ ] .... work directions in brackets the number of times indicated