

Name: _____

Lab 8 Worksheet

Exercise 1

Answer the loop questions for this sketch. Also label specifically what changes using the picture in that row.



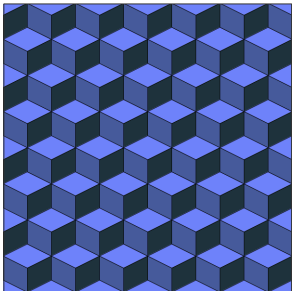
single loop, multiple loops one after another, or nested loops?	
if multiple loops or nested loops, what are the groups?	

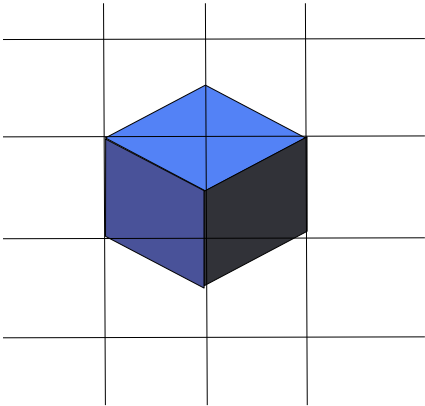
what is repeated?		
what changes from one repetition to the next? (be specific!)		
how do things start?		
how do things change?		
when do you keep going?		
is this a counting loop or a repeat-as- long-as pattern?		

Exercise 2a

The tumbling blocks quilt is made up of a repeated pattern involving several shapes. This calls for a drawing function.

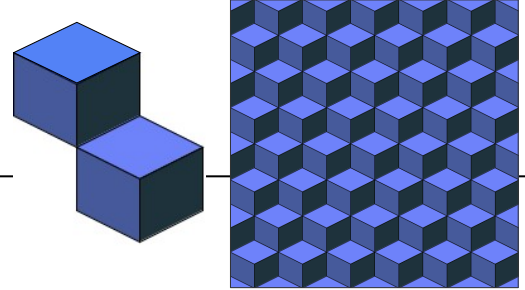
For “how is it drawn?” label the “what differs?” and each of the values needed for drawing the three quads.



what is being drawn?	what differs from one copy to the next?	how is it drawn?
a tumbling block		

Exercise 2b

Now, draw the entire pattern. Hint: consider two blocks arranged as shown as the unit of repetition.



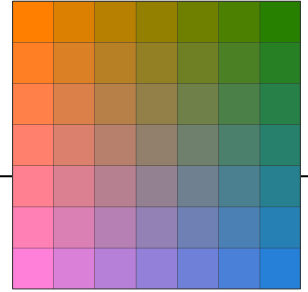
single loop, multiple loops one after another, and/or nested loops?	
if multiple loops or nested loops, what are the groups?	

Address the loop questions for each group identified.

what is the group?		
what is repeated?		
what changes from one repetition to the next? (be specific!)		
how do things start?		
how do things change?		
when do you keep going?		
is this a counting loop or a repeat-as-long-as pattern?		

Exercise 3a

Start with the background pattern.



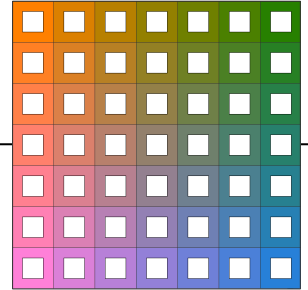
single loop, multiple loops one after another, and/or nested loops?	
if multiple loops or nested loops, what are the groups?	

Address the loop questions for each group identified.

what is the group?		
what is repeated?		
what changes from one repetition to the next? (be specific!)		
how do things start?		
how do things change?		
when do you keep going?		
is this a counting loop or a repeat-as-long-as pattern?		

Exercise 3b

Next, add the white squares.



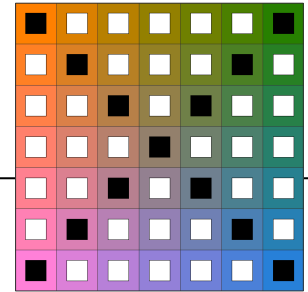
single loop, multiple loops one after another, and/or nested loops?	
if multiple loops or nested loops, what are the groups?	

Address the loop questions for each group identified.

what is the group?		
what is repeated?		
what changes from one repetition to the next? (be specific!)		
how do things start?		
how do things change?		
when do you keep going?		
is this a counting loop or a repeat-as- long-as pattern?		

Exercise 3c

Next, add the black squares.



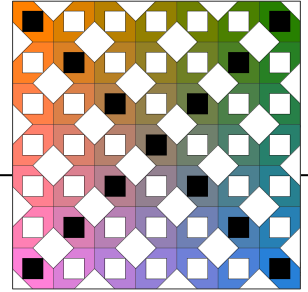
single loop, multiple loops one after another, and/or nested loops?	
if multiple loops or nested loops, what are the groups?	

Address the loop questions for each group identified.

what is the group?		
what is repeated?		
what changes from one repetition to the next? (be specific!)		
how do things start?		
how do things change?		
when do you keep going?		
is this a counting loop or a repeat-as-long-as pattern?		

Exercise 3d

Finally, add the white quads. Use the second copy of the loop questions table on the next page if you need more than two loops.



single loop, multiple loops one after another, and/or nested loops?	
if multiple loops or nested loops, what are the groups?	

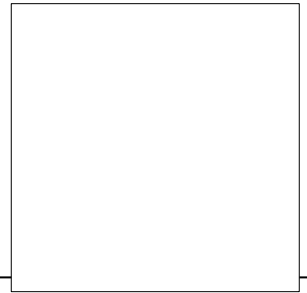
Address the loop questions for each group identified.

what is the group?		
what is repeated?		
what changes from one repetition to the next? (be specific!)		
how do things start?		
how do things change?		
when do you keep going?		
is this a counting loop or a repeat-as-long-as pattern?		

what is the group?		
what is repeated?		
what changes from one repetition to the next? (be specific!)		
how do things start?		
how do things change?		
when do you keep going?		
is this a counting loop or a repeat-as- long-as pattern?		

Exercise 4

Use the next pages for the patterns that will be drawn by loops – one page for each loop. Draw the pattern in the box  and answer the loop questions in the tables.

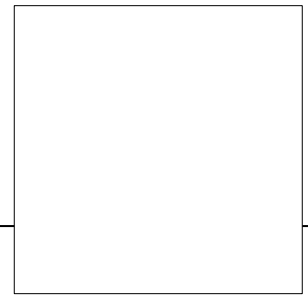


single loop, multiple loops one after another, and/or nested loops?	
if multiple loops or nested loops, what are the groups?	

Address the loop questions for each group identified.

what is the group?		
what is repeated?		
what changes from one repetition to the next? (be specific!)		
how do things start?		
how do things change?		
when do you keep going?		
is this a counting loop or a repeat-as-long-as pattern?		

Use this page for a patterns that will be drawn by loop(s).
 Draw the pattern in the box  and answer the loop questions in the tables.

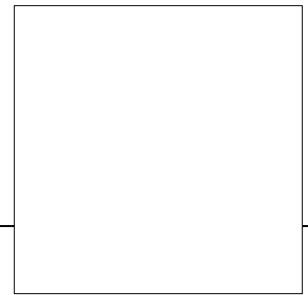


single loop, multiple loops one after another, and/or nested loops?	
if multiple loops or nested loops, what are the groups?	

Address the loop questions for each group identified.

what is the group?		
what is repeated?		
what changes from one repetition to the next? (be specific!)		
how do things start?		
how do things change?		
when do you keep going?		
is this a counting loop or a repeat-as- long-as pattern?		

Use this page for a patterns that will be drawn by loop(s).
 Draw the pattern in the box  and answer the loop questions in the tables.

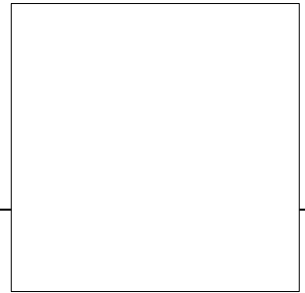


single loop, multiple loops one after another, and/or nested loops?	
if multiple loops or nested loops, what are the groups?	

Address the loop questions for each group identified.

what is the group?		
what is repeated?		
what changes from one repetition to the next? (be specific!)		
how do things start?		
how do things change?		
when do you keep going?		
is this a counting loop or a repeat-as-long-as pattern?		

Use this page for a patterns that will be drawn by loop(s).
 Draw the pattern in the box  and answer the loop questions in the tables.

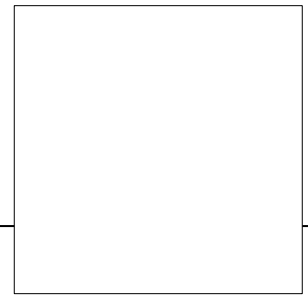


single loop, multiple loops one after another, and/or nested loops?	
if multiple loops or nested loops, what are the groups?	

Address the loop questions for each group identified.

what is the group?		
what is repeated?		
what changes from one repetition to the next? (be specific!)		
how do things start?		
how do things change?		
when do you keep going?		
is this a counting loop or a repeat-as-long-as pattern?		

Use this page for a patterns that will be drawn by loop(s).
 Draw the pattern in the box  and answer the loop questions in the tables.

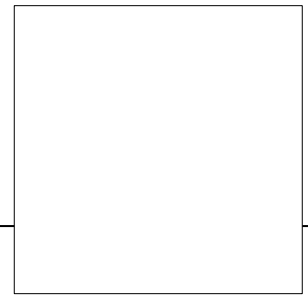


single loop, multiple loops one after another, and/or nested loops?	
if multiple loops or nested loops, what are the groups?	

Address the loop questions for each group identified.

what is the group?		
what is repeated?		
what changes from one repetition to the next? (be specific!)		
how do things start?		
how do things change?		
when do you keep going?		
is this a counting loop or a repeat-as- long-as pattern?		

Use this page for a patterns that will be drawn by loop(s).
 Draw the pattern in the box  and answer the loop questions in the tables.



single loop, multiple loops one after another, and/or nested loops?	
if multiple loops or nested loops, what are the groups?	

Address the loop questions for each group identified.

what is the group?		
what is repeated?		
what changes from one repetition to the next? (be specific!)		
how do things start?		
how do things change?		
when do you keep going?		
is this a counting loop or a repeat-as- long-as pattern?		