The Combination Square

Directions
Pictured above is a combination square. Pictured at the right is a sequence of steps that can be used to lay out the combination square in the rectangle below. Keep all developmental lines light. The darker layout lines pictured at the right are for illustration purposes only. Darken your sketch only when it is correct.

Remember
- Hold the pencil loosely.
- Use developmental lines and the "crating" technique to keep your sketch properly proportioned.
- Only darken developmental lines when you are satisfied that they are correct.
- Keep your sketch neat!

Assessment Rubric
Use developmental lines 1 pt
Use object lines 1 pt
Sketch proper proportion 1 pt
Sketch correct 2 pts
Sketch neat 2 pts

7- A 6- B 5- C 4- D

Complete your sketch here:
The Hacksaw

Directions
Pictured above is a hacksaw. Pictured at the right is a sequence of steps that can be used to lay out the hacksaw in the rectangle below. Keep all developmental lines light. The darker layout lines pictured at the right are for illustration purposes only. Darken your sketch only when it is correct.

Remember
- Hold the pencil loosely.
- Use developmental lines and the “crating” technique to keep your sketch properly proportioned.
- Only darken developmental lines when you are satisfied that they are correct.
- Keep your sketch neat!

Assessment Rubric

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Use developmental lines</td>
<td>1 pt</td>
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<tr>
<td>Use object lines</td>
<td>1 pt</td>
</tr>
<tr>
<td>Sketch proper proportion</td>
<td>1 pt</td>
</tr>
<tr>
<td>Sketch correct</td>
<td>2 pts</td>
</tr>
<tr>
<td>Sketch neat</td>
<td>2 pts</td>
</tr>
</tbody>
</table>

7- A    6- B    5- C   4- D

Complete your sketch here:

Step 1:

Step 2

Step 3

Step 4

Step 5
Add additional detail.
The Needlenose Pliers

Directions
Pictured above is a pair of needlenose pliers. Pictured at the right is a sequence of steps that can be used to lay out the needlenose pliers in the rectangle below. Keep all developmental lines light. The darker layout lines pictured at the right are for illustration purposes only. Darken your sketch only when it is correct.

Remember
- Hold the pencil loosely.
- Use developmental lines and the "crating" technique to keep your sketch properly proportioned.
- Only darken developmental lines when you are satisfied that they are correct.
- Keep your sketch neat!

Assessment Rubric
Use developmental lines 1 pt
Use object lines 1 pt
Sketch proper proportion 1 pt
Sketch correct 2 pts
Sketch neat 2 pts

Complete your sketch here:

Add additional detail.
The Open End Wrench

Directions
Pictured above is an open end wrench. Pictured at the right is a sequence of steps that can be used to lay out the open end wrench in the rectangle below. Keep all developmental lines light. The darker layout lines pictured at the right are for illustration purposes only. Darken your sketch only when it is correct.

Remember
- Hold the pencil loosely.
- Use developmental lines and the “crating” technique to keep your sketch properly proportioned.
- Only darken developmental lines when you are satisfied that they are correct.
- Keep your sketch neat!

Assessment Rubric
Use developmental lines 1 pt
Use object lines 1 pt
Sketch proper proportion 1 pt
Sketch correct 2 pts
Sketch neat 2 pts
7- A 6- B 5- C 4- D

Complete your sketch here:

Step 1

Step 2

Step 3

Step 4

Step 5:
Add additional detail.
The Adjustable Wrench

Directions
Pictured above is an adjustable wrench. Pictured at the right is a sequence of steps that can be used to layout the adjustable wrench in the rectangle below. Keep all developmental lines light. The darker layout lines pictured at the right are for illustration purposes only. Darken your sketch only when it is correct.

Remember
● Hold the pencil loosely.
● Use Developmental lines and the “crating” technique to keep your sketch properly proportioned.
● Only darken developmental lines when you are satisfied that they are correct.
● Keep your sketch neat!

Assessment Rubric
Use developmental lines 1 pt
Use object lines 1 pt
Sketch proper proportion 1 pt
Sketch correct 2 pts
Sketch neat 2 pts

7- A  6- B  5- C  4- D

Complete your sketch here:

Add additional detail.
Hand Tool Identification Guide

- Allen
- Punch
- Wooden Mallet
- Hand File
- Drill Bit
- Ball Peen Hammer
- T-wrench
- Hand Tap
- Phillips Head Screwdriver
- Flathead Screwdriver
- Jewelers Screw Driver Set
- Tap Wrench
- Shears
- Crimping Tool
- Wire Stripper
- Scissors
- Hack Saw
- Nippers
- Wire Ties & Tie Gun
- Hand File Identification Guide
- Safety Glasses
- Ear Protection
- C-Clamp
- Wire Ties & Tie Gun
- Hand Level
- Adjustable Wrench
- Open End Wrench
- Snap Ring Pliers
- Needle Nose Pliers
- Socket Wrench
- Adjustable Wrench
- Tri Square
- Hand Level
- Dial Caliper
- Combination Square
- Protractor
- Micrometer
- Tri Square
- Protractor
- Hand File Identification Guide