

# PAA 10/20/30

## Student Learning Guide

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

You will use this guide to help plan your year. Please refer to the calendar on the back of this page to set your due dates. All due dates will be set in conjunction with your instructor.

### Woodworking:

<b>Woodworking safety</b>	Start:	End:	
<b>Woodworking theory</b>	Start:	End:	
<b>Woodworking project</b>	Start:	Checkpoint:	End:

### Welding:

<b>Welding safety</b>	Start:	End:	
<b>Welding theory</b>	Start:	End:	
<b>Welding project/tests</b>	Start:	Checkpoint:	End:

### Optional:

Choose only 1 of the following options:

<b>Drafting</b>	Start:	Checkpoint:	End:
<b>Electrical</b>	Start:	Checkpoint:	End:
<b>Small engines</b>	Start:	Checkpoint:	End:
<b>Construction</b>	Start:	Checkpoint:	End:
<b>Missions project</b>	Start:	Checkpoint:	End:
<b>Photography</b>	Start:	Checkpoint:	End:

		<b>2016/17</b> School Year Calendar
August 1	Civic Holiday	
September 5	Labour Day	
October 10	Thanksgiving Day	
November 11	Remembrance Day	
December 26	Boxing Day	
December 27	In recognition of Christmas Day (Dec. 25)	
January 2	In recognition of New Year's Day (Jan. 1)	
February 20	Family Day	
April 14	Good Friday	
April 17	Easter Monday	
May 22	Victoria Day	
July 3	In recognition of Canada Day (July 1)	

Legend		Days
	School year begins/ends for students	
	Statutory Holidays	12.0
	School Holidays	13.0
	Preparation Time	9.5
	PSTA General Assembly	1.0
	Professional Development	0.5
	School Operational Days	1.0
	Protected Mondays	20.0
	High School Final Exams	8.0

Safety ~ 1 week  
 Theory ~ 2 weeks  
 Wood project ~ 12 weeks  
 Welding tests ~ 12 weeks  
 Optional → varies

Year ends

2016	August						0/3
S	M	T	W	Th	F	S	
	1	2	3	4	5	6	
7	8	9	10	11	12	13	
14	15	16	17	18	19	20	
21	22	23	24	25	26	27	
28	29	30	31				

2016	October						19/20
S	M	T	W	Th	F	S	
						1	
2	3 <sub>c</sub>	4 <sub>d</sub>	5 <sub>e</sub>	6 <sub>f</sub>	7	8	
9	10	11 <sub>A</sub>	12 <sub>B</sub>	13 <sub>C</sub>	14 <sub>D</sub>	15	
16	17 <sub>E</sub>	18 <sub>F</sub>	19 <sub>A</sub>	20 <sub>B</sub>	21 <sub>C</sub>	22	
23	24 <sub>D</sub>	25 <sub>E</sub>	26 <sub>F</sub>	27 <sub>A</sub>	28 <sub>B</sub>	29	
30	31 <sub>C</sub>						

2016	December						15/15
S	M	T	W	Th	F	S	
				1 <sub>F</sub>	2 <sub>A</sub>	3	
4	5 <sub>B</sub>	6 <sub>C</sub>	7 <sub>D</sub>	8 <sub>E</sub>	9 <sub>F</sub>	10	
11	12 <sub>A</sub>	13 <sub>B</sub>	14 <sub>C</sub>	15 <sub>D</sub>	16 <sub>E</sub>	17	
18	19 <sub>F</sub>	20 <sub>A</sub>	21 <sub>B</sub>	22	23	24	
25	26	27	28	29	30	31	

2017	February						15/15
S	M	T	W	Th	F	S	
			1 <sub>E</sub>	2 <sub>F</sub>	3 <sub>A</sub>	4	
5	6 <sub>B</sub>	7 <sub>C</sub>	8 <sub>D</sub>	9 <sub>E</sub>	10 <sub>F</sub>	11	
12	13 <sub>A</sub>	14 <sub>B</sub>	15 <sub>C</sub>	16 <sub>D</sub>	17 <sub>E</sub>	18	
19	20	21	22	23	24	25	
26	27 <sub>F</sub>	28 <sub>A</sub>					

2017	April						14/14
S	M	T	W	Th	F	S	
						1	
2	3 <sub>F</sub>	4 <sub>A</sub>	5 <sub>B</sub>	6 <sub>C</sub>	7 <sub>D</sub>	8	
9	10 <sub>E</sub>	11 <sub>F</sub>	12 <sub>A</sub>	13 <sub>B</sub>	14	15	
16	17	18	19	20	21	22	
23	24 <sub>C</sub>	25 <sub>D</sub>	26 <sub>E</sub>	27 <sub>F</sub>	28 <sub>A</sub>	29	
30							

2017	June						19/22
S	M	T	W	Th	F	S	
				1 <sub>E</sub>	2 <sub>F</sub>	3	
4	5	6 <sub>A</sub>	7 <sub>B</sub>	8 <sub>C</sub>	9 <sub>D</sub>	10	
11	12 <sub>E</sub>	13 <sub>F</sub>	14 <sub>A</sub>	15 <sub>B</sub>	16 <sub>C</sub>	17	
18	19 <sub>D</sub>	20 <sub>E</sub>	21 <sub>F</sub>	22 <sub>A</sub>	23 <sub>B</sub>	24	
25	26 <sub>C</sub>	27 <sub>D</sub>	28 <sub>E</sub>	29	30		

2016	September						20/21
S	M	T	W	Th	F	S	
				1 <sub>A</sub>	2 <sub>B</sub>	3	
4	5	6 <sub>C</sub>	7 <sub>D</sub>	8 <sub>E</sub>	9 <sub>F</sub>	10	
11	12 <sub>A</sub>	13 <sub>B</sub>	14 <sub>C</sub>	15 <sub>D</sub>	16	17	
18	19 <sub>E</sub>	20 <sub>F</sub>	21 <sub>A</sub>	22 <sub>B</sub>	23 <sub>C</sub>	24	
25	26 <sub>D</sub>	27 <sub>E</sub>	28 <sub>F</sub>	29 <sub>A</sub>	30 <sub>B</sub>		

2016	November						20/21
S	M	T	W	Th	F	S	
		1 <sub>D</sub>	2 <sub>E</sub>	3 <sub>F</sub>	4 <sub>A</sub>	5	
6	7 <sub>B</sub>	8 <sub>C</sub>	9 <sub>D</sub>	10 <sub>E</sub>	11	12	
13	14	15 <sub>F</sub>	16 <sub>A</sub>	17 <sub>B</sub>	18 <sub>C</sub>	19	
20	21 <sub>D</sub>	22 <sub>E</sub>	23 <sub>F</sub>	24 <sub>A</sub>	25 <sub>B</sub>	26	
27	28 <sub>C</sub>	29 <sub>D</sub>	30 <sub>E</sub>				

2017	January						20/21
S	M	T	W	Th	F	S	
1	2	3 <sub>C</sub>	4 <sub>D</sub>	5 <sub>E</sub>	6 <sub>F</sub>	7	
8	9 <sub>A</sub>	10 <sub>B</sub>	11 <sub>C</sub>	12 <sub>D</sub>	13 <sub>E</sub>	14	
15	16 <sub>F</sub>	17 <sub>A</sub>	18 <sub>B</sub>	19 <sub>C</sub>	20 <sub>D</sub>	21	
22	23 <sub>E</sub>	24 <sub>F</sub>	25 <sub>A</sub>	26 <sub>B</sub>	27 <sub>C</sub>	28	
29	30	31 <sub>D</sub>					

2017	March						22/23
S	M	T	W	Th	F	S	
			1 <sub>B</sub>	2 <sub>C</sub>	3 <sub>D</sub>	4	
5	6 <sub>E</sub>	7 <sub>F</sub>	8 <sub>A</sub>	9 <sub>B</sub>	10 <sub>C</sub>	11	
12	13 <sub>D</sub>	14 <sub>E</sub>	15 <sub>F</sub>	16 <sub>A</sub>	17 <sub>B</sub>	18	
19	20 <sub>C</sub>	21 <sub>D</sub>	22 <sub>E</sub>	23 <sub>F</sub>	24	25	
26	27 <sub>A</sub>	28 <sub>B</sub>	29 <sub>C</sub>	30 <sub>D</sub>	31 <sub>E</sub>		

2017	May						21/22
S	M	T	W	Th	F	S	
	1 <sub>B</sub>	2 <sub>C</sub>	3 <sub>D</sub>	4 <sub>E</sub>	5 <sub>F</sub>	6	
7	8 <sub>A</sub>	9 <sub>B</sub>	10 <sub>C</sub>	11 <sub>D</sub>	12 <sub>E</sub>	13	
14	15 <sub>F</sub>	16 <sub>A</sub>	17 <sub>B</sub>	18 <sub>C</sub>	19	20	
21	22	23 <sub>D</sub>	24 <sub>E</sub>	25 <sub>F</sub>	26 <sub>A</sub>	27	
28	29 <sub>B</sub>	30 <sub>C</sub>	31 <sub>D</sub>				

2017	July						
S	M	T	W	Th	F	S	
						1	
2	3	4	5	6	7	8	
9	10	11	12	13	14	15	
16	17	18	19	20	21	22	
23	24	25	26	27	28	29	
30	31						

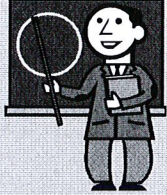
185 Instructional Days  
 Semester I = 93 Instructional Day  
 Semester II = 92 Instructional Days

197 Operational Days  
 Semester I = 100 Operational Days  
 Semester II = 97 Operational Days



# Woodworking

## Woods – Safety



### Instructions:

In this activity you are going to complete the safety assignments followed by a safety test. You must get 100% on the final safety test before you move on.

Start Date: \_\_\_\_\_



### Materials and Equipment:

- Calculator
- Pencil

End Date: \_\_\_\_\_

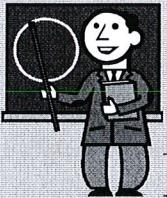


### Teacher Check Point

Teacher Signature \_\_\_\_\_

- At this point you will need to talk with your teacher to collect the woodworking theory materials.

## Woods – Theory



### Instructions:

In this activity you are going to complete the theory assignments for your woodworking project.

Start Date: \_\_\_\_\_



### Materials and Equipment:

- Calculator
- Pencil

End Date: \_\_\_\_\_

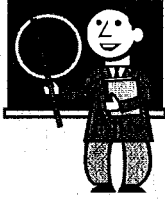


### Teacher Check Point

Teacher Signature \_\_\_\_\_

- At this point you can move onto your project planning and cost calculations.

# Woods – Project



## Instructions:

In this activity you are going to generate an idea for your woodworking project. Place or draw a picture of your project below. The detailed plans including a cut list can go below or attach it to the back of this booklet.

Start Date: \_\_\_\_\_

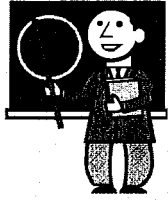


## Materials and Equipment:

- Glue
- Pencil
- Pencil crayons

End Date: \_\_\_\_\_

## Woods – Project Cost Calculation



### **Instructions:**

In this activity you are going to design or locate plans for your project.

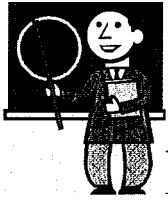


### **Materials and Equipment:**

- Calculator
- Pencil



# Cost Calculation



## Instructions:

Using the steps below, now calculate the cost of your project.

## Procedure:

Step 1) In the first column, list the names of all the parts of your project. Example : top, bottom

Step 2) In the second column list the quantity of each part.

Step 3) In **Inches** give the thickness, width and length of each part. Make sure to take into consideration the type of joints used.

Step 4) List the type of material used.

Step 5) Calculate the amount of material used in Board feet using the following formula.

$$\frac{\text{Number of pieces} \times \text{Thickness} \times \text{Length} \times \text{Width}}{144}$$

**Note: If the thickness is less than 1 inch , enter 1 into your calculator for thickness.**

Step 6) Find out the price of the material used.

Step 7) Add up the cost of the material and place that in the subtotal box.

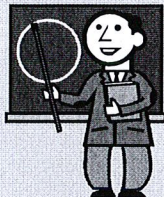
Step 8) Calculate the cost of **material waste** and **Shop material** by taking 10% of the subtotal for each one.

Step 9) Find the total cost of the project.



# Welding

## Welding – Safety



### Instructions:

In this activity you are going to complete the safety assignments followed by a safety test. You must get 100% on the final safety test before you move on.

Start Date: \_\_\_\_\_



### Materials and Equipment:

- Calculator
- Pencil

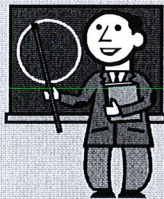
End Date: \_\_\_\_\_



### Teacher Check Point Teacher Signature \_\_\_\_\_

- At this point you will need to talk with your teacher to collect the woodworking theory materials.

## Welding – Theory



### Instructions:

In this activity you are going to complete the theory assignments for your woodworking project.

Start Date: \_\_\_\_\_



### Materials and Equipment:

- Calculator
- Pencil

End Date: \_\_\_\_\_

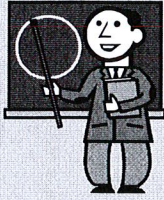


### Teacher Check Point Teacher Signature \_\_\_\_\_

- At this point you can move onto your welding tests.



# Welding – Project/Tests



## Instructions:

In this activity you are going to complete the tests that accompany your welding skills.

Start Date: \_\_\_\_\_



## Materials and Equipment:

- Calculator
- Pencil

End Date: \_\_\_\_\_

### Part 1

Class	Activity Number	Activity Name
1-3	1	SMAW Questions
4	2 VIDEO	Basics of Stick Welding: Teach Yourself Stick Welding (Part 1 of 5)
4	3	Striking an Arc
5	4 VIDEO	Basics of Stick Welding: Teach Yourself Stick Welding (Part 2 of 5)
5-7	5	Fillet Welds and Padding
8	6 VIDEO	Basics of Stick Welding: Teach Yourself Stick Welding (Part 3 of 5)
8-10	7	Fillet Welds and Padding with variety of electrodes
11-12	8	Fillet Butt Joints
13-14	9	Fillet Lap Joints
15-16	10	Open Corner Groove Joints
17-20	11	Die Project

### Part 2

Class	Activity Number	Activity Name
1-3	1	GMAW Questions
4	2 VIDEO	Teach Yourself MIG Welding (Part 1 of 4) [Basics & Machine Setup]

4	3	Set up machine and lay some beads
5	4 VIDEO	Teach Yourself MIG Welding (Part 2 of 4) [Flat & Horizontal Welding]
5-7	5	Flat and horizontal welds
8	6 VIDEO	Vertical MIG Welding Lesson: Uphill & Downhill Techniques (Teach Yourself MIG Part 3 of 4)
8-10	7	Vertical welding
11-12	8	Fillet Butt Joints
13-14	9	Fillet Lap Joints
15-16	10	Open Corner Groove Joints
17-20	11	Project

### Part 3

Class	Activity Number	Activity Name
1-3	1	GTAW Questions
4	2 VIDEO	Teach Yourself How to Tig Weld Steel (Part 1 of 4) [Basics & Machine Setup]
4	3	Set up machine and lay some beads
5	4 VIDEO	Teach Yourself How to Tig Weld Steel (Part 2 of 4) [Flat & Horizontal Welding]
5-7	5	Outside corner joint and lap joint
8	6 VIDEO	Teach Yourself How to Tig Weld Steel (Part 3 of 4)
8-10	7	Inside corner joints and fillet joints
11-15	8	Decorative Project
16-25	9	Project (Does NOT need to be a TIG project)



## Teacher Check Point Teacher Signature \_\_\_\_\_

- At this point you can move onto your project planning and cost calculations.