

### Lesson #4: Radial-Arm Saw Safety Exam

#### Objectives

##### Students will be able to...

- Identify each of the major components of the Radial-Arm Saw and their purpose.
- Describe the use and operation of the Radial-Arm Saw.
- Demonstrate the safe operation of the Radial-Arm Saw.

#### Common Core Standards

RSIT 11-12.2  
RLST 11-12.2  
Problem Solving – 5.1 & 5.4  
Health and Safety – 6.1, 6.2, 6.3 & 6.10  
Cabinetmaking and Wood Products Pathway A4.1, 4.3, A4.4 & A6.1  
Responsibility and Flexibility – 7.4  
Technical Knowledge and Skills 10.1, 10.2  
Demonstration and Application 11.1  
Residential and Commercial Construction Pathway D2.1

#### Materials

Radial-Arm Saw Safety Exam  
Radial-Arm Saw

#### Lesson Sequence

- Have students grab some safety glasses and enter the shop for a safety and operations demonstration on the radial-arm saw.
- Return to classroom and hand out *Radial-Arm Saw Safety Exam*. No one starts a project until all the required safety tests are passed. Collect the tests when the students are done and re-distribute them to their classmates for grading. Have the students write “corrected by” and print their name somewhere on the front side of the test and circle it. Read and discuss each question with the correct answer. Take this opportunity to again reinforce/solidify operational safety in the student’s minds. When finished, have the students write the number correct out of 15 on the front of the

sheet and turn them in.

- Return tests that have any incorrect answers to their original owners. Have these students 'correct' each wrong answer by writing out the question (with the correct answer) on the back of the test 2 times. Students will retake the test tomorrow.

### Assessment

When students pass the table saw exam, they can then use the table saw in the shop.

### Accommodations/Modifications

One on One Support  
Check for Understanding  
Extra Time  
Test Read Aloud

### Radial Arm Saw Safety Exam

Directions: Fill in the blank spaces with the words from the word bank.

1. Always wear \_\_\_\_\_ fitting clothes.
2. When switching a blade, tighten the arbor nut using the \_\_\_\_\_ wrenches used in removing the blade.
3. Be sure to always \_\_\_\_\_ all clamps, guards, and locking handles.
4. When ripping, feed material from \_\_\_\_\_ end of anti-kickback device.
5. Never leave saw \_\_\_\_\_ outward on the arm.
6. Never make \_\_\_\_\_ while saw is running.
7. Never leave the \_\_\_\_\_ zone while saw is running.
8. Be sure blade is not warped, \_\_\_\_\_ or cracked.
9. Do not attempt to \_\_\_\_\_ the machine by forcing a piece of wood against the blade.
10. The teeth of the blade should be facing \_\_\_\_\_ from the operator.
11. Do not crosscut in \_\_\_\_\_ direction.
12. Always use the \_\_\_\_\_ blade for the specific cross or rip cut.
13. Always keep your fingers \_\_\_\_\_ inches away from the blade.
14. It is \_\_\_\_\_ safe to talk to the operator while the saw is in use.
15. Please be sure to get \_\_\_\_\_ from your instructor before making any changes to the machine.

Permission
Four
Opposite
Snug
Reverse
Proper
Safety
Same
Extended
Eight
Dull
Tighten
Away
Not
Six
Adjustments
Stop

**Radial Arm Saw Safety Exam – Answer Key**

Directions: Fill in the blank spaces with the words from the word bank.

1. Always wear **snug** fitting clothes.
2. When changing a blade, tighten the arbor nut using the **same** wrenches used in removing the blade.
3. Be sure to always **tighten** all clamps, guards, and locking handles.
4. When ripping, feed material from the **opposite** end of anti-kickback device.
5. Never leave the saw **extended** outward on the arm.
6. Never make **adjustments** while saw is running.
7. Never leave the **safety** zone while saw is running.
8. Be sure the blade is not warped, **dull**, or cracked.
9. Do not attempt to **stop** the machine by forcing a piece of wood against the blade.
10. The teeth at the bottom of the blade should be facing **away** from the operator.
11. Do not crosscut in **reverse** direction.
12. Always use the **proper** blade for the specific cross or rip cut.
13. Always keep your fingers **six** inches away from the blade.
14. It is **not** safe to talk to the operator while the saw is in use.
15. Please be sure to get **permission** from your instructor before making any changes to the machine.