

Introductory Knife Skills

Description

The knife is an important basic tool used in the kitchen. In this activity students will learn the parts of a knife; about types of knives, and the materials used to construct them, as well as the importance of using correct, consistent cutting techniques.

Lesson Objectives

Students will be able to:

- handle a knife safely
- handle a knife correctly
- correctly place the guiding hand when cutting
- identify a variety of commonly used kitchen knives correctly
- identify a variety of knife cuts by their shape and size
- demonstrate a variety of knife skills, and
- compare the difference between honing and sharpening knives.

Assumptions

- Students have received orientation on the subject of kitchen and food safety.
- The teacher will be familiar with and will utilize correct knife skill techniques using appropriate resources.
- The teacher will provide a variety of ingredients for knife cutting activity.
- The facility will supply the correct knives and equipment required to complete the activity.

The following Activity Plan is to be completed prior to this Activity Plan:

- Workstation Set-up

Safety Considerations

- Ensure the use of required personal protective equipment.
- Practise safe knife handling and use.
- Use correct knife cleaning procedures.
- Ensure the proper sanitizing and storage of knives upon completion of the activity.



Terminology

Knife Materials

carbon steel: Carbon steel is steel that contains a certain percentage of carbon, which determines the characteristics of the steel.

high-carbon stainless steel: High-carbon stainless steel is carbon steel that also contains chromium, giving it the best qualities of both carbon steel and stainless steel.

stainless-steel alloy: Often used in making cutlery, stainless steel is an alloy of iron that contains 10.5% or more of chromium. The alloy is able to resist tarnishing and rust.

Types of Knives

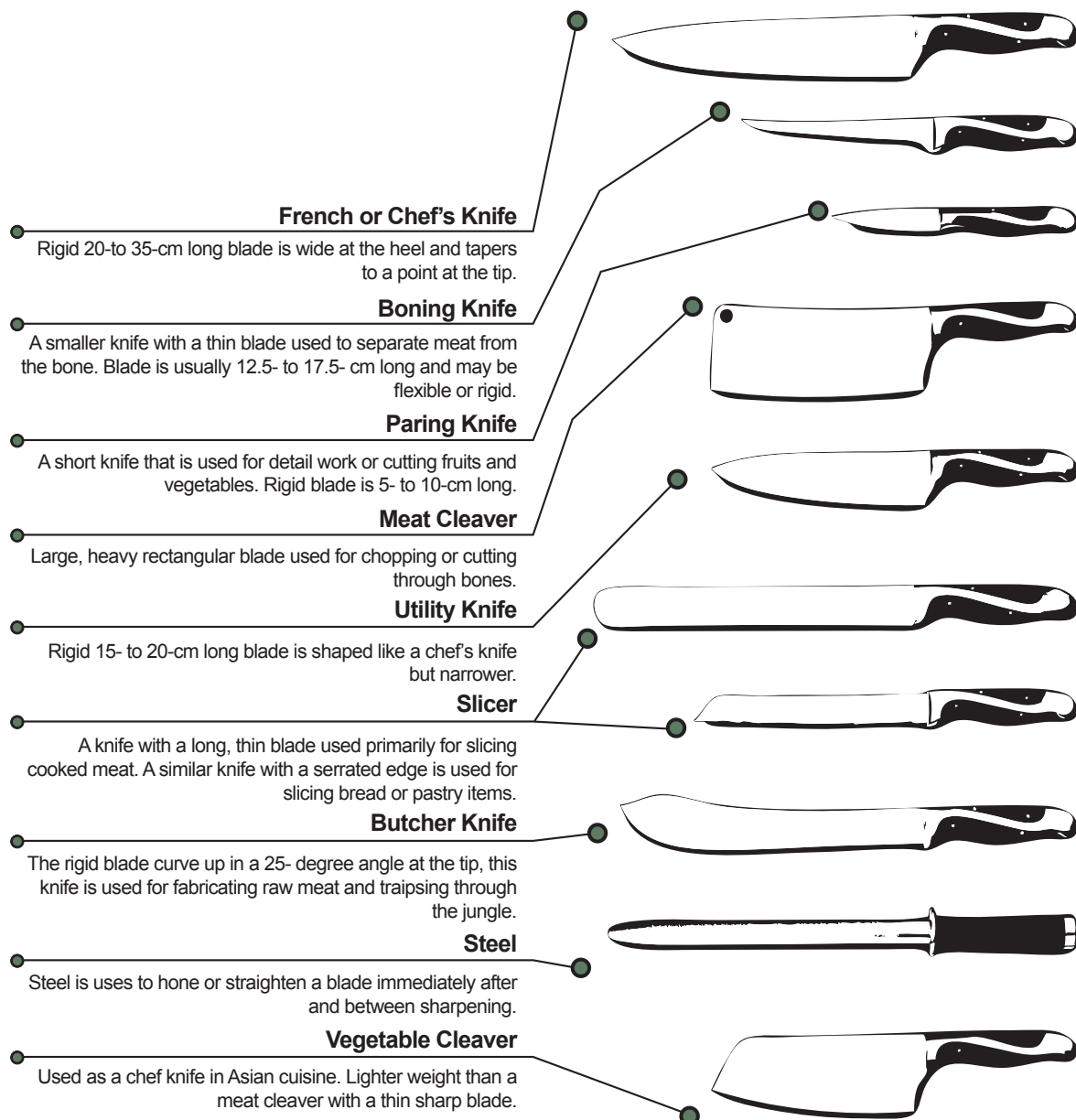
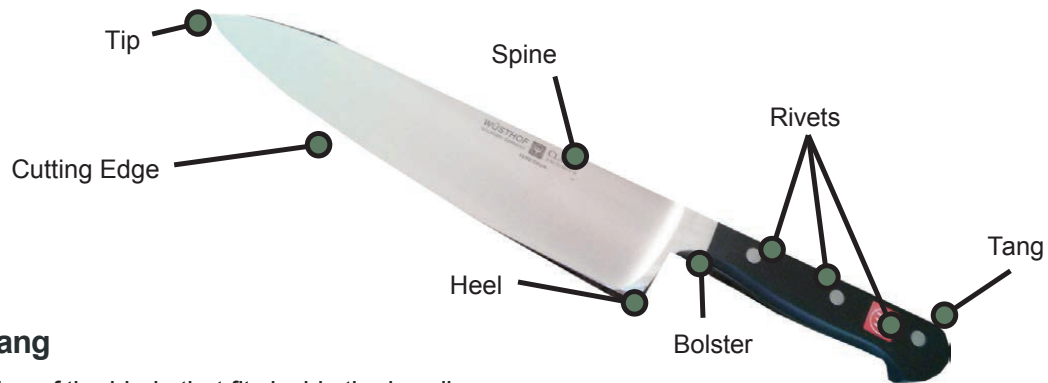


Figure 1—Types of knives

Knife Parts



The Tang

- a portion of the blade that fits inside the handle
- the best knives are made with a full tang running the length of the handle
- they also have a bolster where the blade meets the handle
- cheaper knives may have a $\frac{3}{4}$ length tang or a thin "rattail" tang
- a full tang is best because it provides support, durability and balance

Figure 2—Kinife parts

Knife Cuts

- Large, medium, small dice
- Batonnet
- Chop
- Mince
- Shred

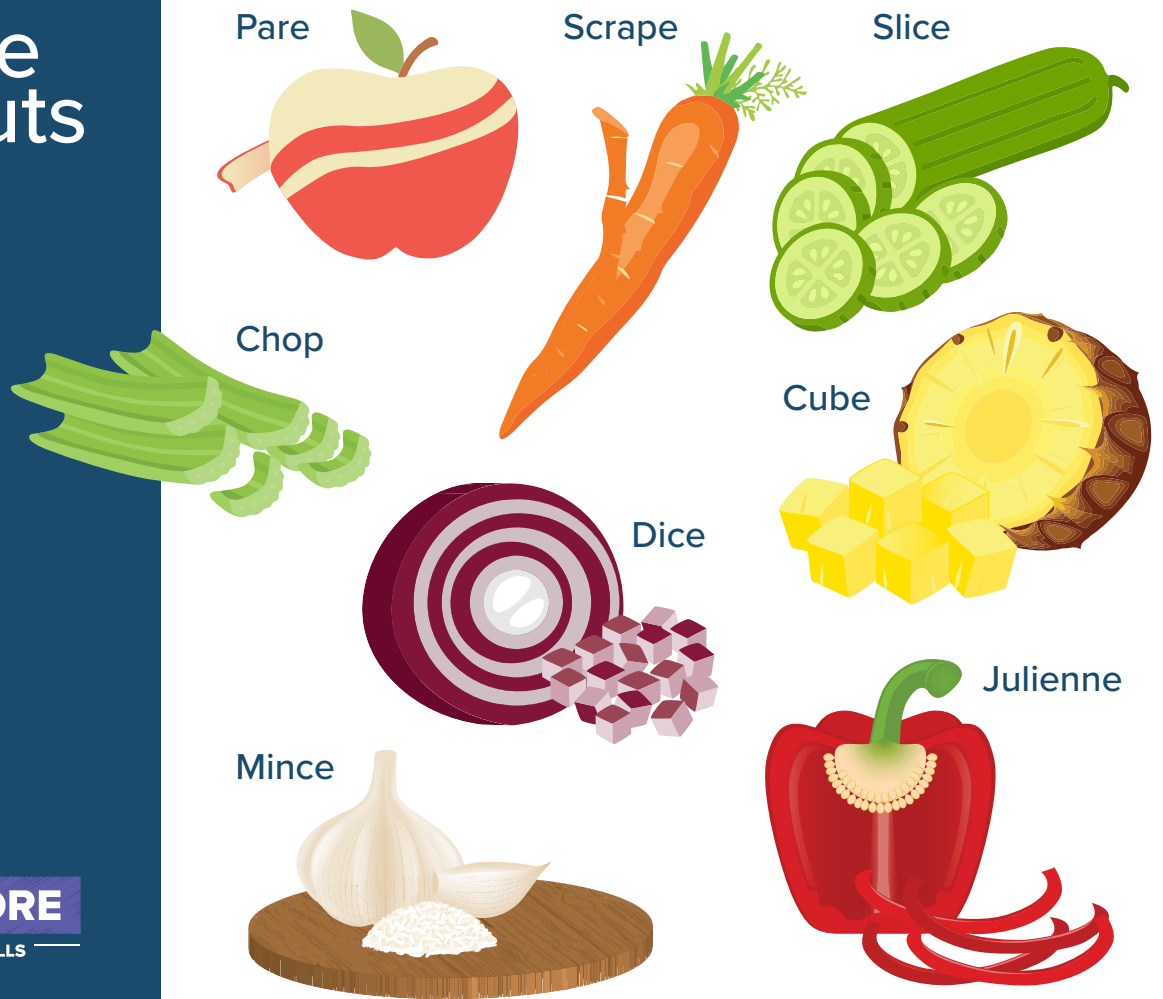


Figure 3—Knife cuts

Knife Cuts & Dimensions

Julienne



1 mm x 1 mm x 4 cm

Matchstick



2 mm x 2 mm x 4 cm

Baton



5 mm x 5 mm x 5 cm

Pommes Frites



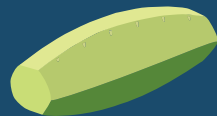
1 cm x 1 cm x 7 cm

Pommes Pont Neuf



1.5 cm x 1.5 cm x 8 cm

Turned



Brunoise



2 mm x 2 mm x 2 mm

Small Dice



5 mm square

Medium Dice



7 mm square

Large Dice



1 cm square

Paysanne



1 cm x 1 cm x 2 mm

ita | YOUTH

EXPLORE

TRADES SKILLS

Figure 4—Knife cut dimensions

Estimated Time

2 70-minute classes

Recommended Number of Students

Up to 24

Facilities

Home Economics teaching lab and/or Culinary Arts teaching kitchen

Tools

- chef's knives
- paring knives
- vegetable peeler
- cutting boards

Materials

An assortment of foods required for knife skills practice (potatoes, carrots, onion, celery, etc.)

Resources

Draz, John, and Christopher Koetke. *The Culinary Professional*. 3rd ed. Goodheart-Willcox, 2017. Pages 173–180 and 188–197.

Gisslen, Wayne. *Professional Cooking for Canadian Chefs*. 8th ed. John Wiley & Sons, Inc., Hoboken, New Jersey. 2014

Demonstrating Skills And Knowledge

Procedure

Day 1: Teacher-led Activity

Knife cut station set-up and knife cutting demonstration

1. The teacher will demonstrate the proper procedure for setting up a knife cutting station.
2. The equipment at the station will consist of a cutting board, chef 's knife, paring knife, vegetable peeler, a container of clean water to store knife cuts, clean towel, sanitation, and compost. Class discussion about the importance of sanitation in the kitchen is recommended.
3. The food at the station will consist of three potatoes, two medium carrots, and one onion.
4. The teacher will demonstrate the proper cleaning and peeling of each of the vegetables.
5. The teacher will introduce the class to each of the knives and their specific uses.
6. The teacher will demonstrate large, small, and medium dice using each of the three potatoes.
7. The teacher will demonstrate the batonnet (French fry cut) using the carrot.
8. The teacher will demonstrate rough chop and mince with the onion.
9. Class discussion to involve the importance of consistency in knife cuts as well as knife safety, correct technique, and specific sizes of each cut.
10. Encourage the class to compare and contrast the knife cuts and to discuss the possible uses for each of the cut vegetables.
11. The class will store and label each of the vegetables properly for future use.
12. The class will break down the station and clean the demonstration table.

Day 2: Student-led Activity

1. The student will set up a proper knife cutting station.
2. The equipment at the station will consist of a cutting board, chef's knife, paring knife, vegetable peeler, container of clean water to store knife cuts, clean towel, sanitation, and compost. Class discussion about the importance of sanitation in the kitchen is recommended.
3. The food at the station will consist of three potatoes, two medium carrots, and one onion.
4. The student will clean and peel all of their vegetables, making sure to store peeled potatoes in the container of water.
5. The students will use each of their three potatoes to cut small, medium, and large dice.
6. The students will cut batonnet with each of their carrots.

7. The students will use one half of their onion to produce rough chop and the other half to produce mince.
8. As students finish their knife cuts, have them display each of them on their cutting boards. Remind students of the importance of keeping their station clutter-free and sanitized. Compost to be separated from usable waste.
9. Have the class compare their own knife cuts—is the large dice all the same size?
10. Have the class compare their knife cuts with the knife cuts of other students.
11. Have the class combine the knife cuts for storage. All large dice in one container, all medium dice in one container, and so on.
12. The class will store and label each of the vegetables properly for future use.
13. The class will break down the station and clean their stations.

Evaluation Guidelines

The students and teacher can evaluate the knife cuts through measurement and comparison in order to establish consistent practice moving forward.

Students can be evaluated on consistency of cuts, minimization of waste, and following of proper safety and sanitation procedures.

Emphasis should be placed on student participation and effort. The students can expect to see improvement in their basic knife skills as they progress through each of the cook Activity Plans.

Extension Activities

Students should be encouraged to practise their knife skills in an everyday setting in order to see improvement in their knife skills. Additional knife cuts can be discovered as the students progress through the cook Activity Plan.

Creating recipes or dishes that utilize the knife cuts will help the students to understand their importance.