



Plumbing Lesson Five: Pipe Fittings and Parts

Student Handouts

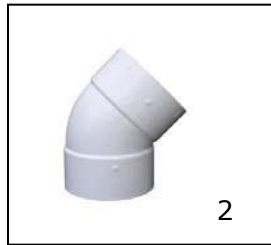
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Pipe Fittings and Parts



1

PVC 90° elbow



2

PVC 1/4 bend



3

PVC threaded coupling



4

CPVC tee



5

PVC double tee



6

PVC cross



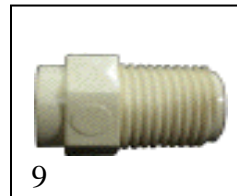
7

PVC bushing



8

PVC union



9

CPVC male adapter



10

PVC clean out



11

ABS closet flange



12

ABS cap



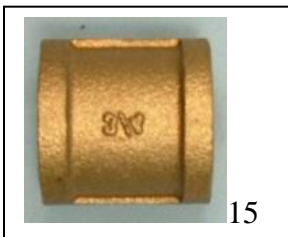
13

ABS p-trap



14

ABS wye



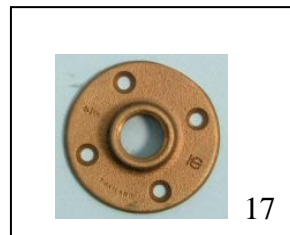
15

brass coupling



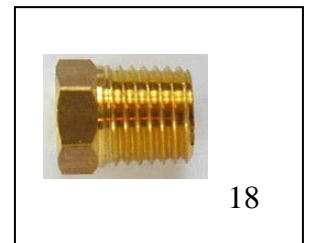
16

brass cross



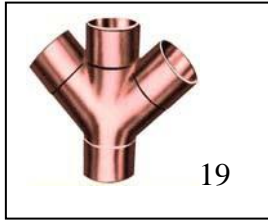
17

brass floor flange



18

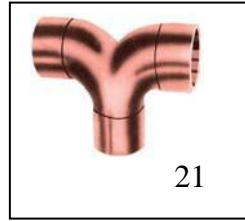
brass bushing



copper double elbow



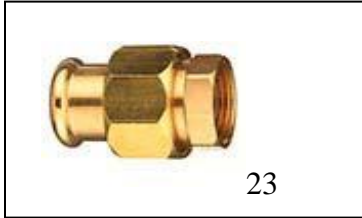
copper wye



copper double wye



copper cross



copper union



copper female adapter



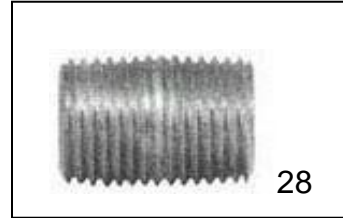
copper male adapter



galvanized steel 90° elbow



galvanized steel 45° elbow



galvanized steel nipple



black iron reducing tee



black iron 90° street elbow



black iron plug



black iron floor flange



black iron hex bushing

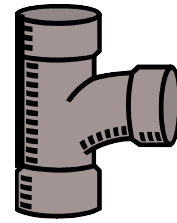


cast iron clean out



chrome p-trap

Understanding Pipe Fittings: Names



	<u>Material</u>	<u>Size or Special Shape</u>	<u>Fitting Name</u>
1.	PVC	90 degree	elbow
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____
16.	_____	_____	_____

Material

Size or Special Shape

Fitting Name

17.	_____	_____	_____
18.	_____	_____	_____
19.	_____	_____	_____
20.	_____	_____	_____
21.	_____	_____	_____
22.	_____	_____	_____
23.	_____	_____	_____
24.	_____	_____	_____
25.	_____	_____	_____
26.	_____	_____	_____
27.	_____	_____	_____
28.	_____	_____	_____
29.	_____	_____	_____
30.	_____	_____	_____
31.	_____	_____	_____
32.	_____	_____	_____
33.	_____	_____	_____
34.	_____	_____	_____
35.	_____	_____	_____

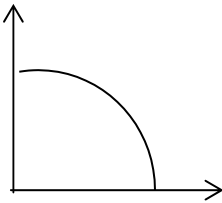
Understanding Pipe Fittings: Shapes and Sizes

Angles and Fractions

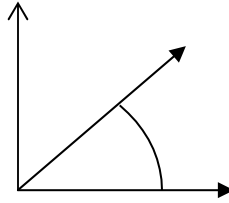
When a fitting has an angle or curve in it, its name will have a degree ($^{\circ}$) or a fraction ($\frac{1}{4}$) in it. The degree or fraction describes how big the curve is in the fitting.



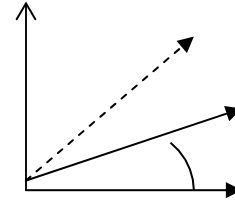
Degrees of Angles or Curves



90 degree angle
 90° angle

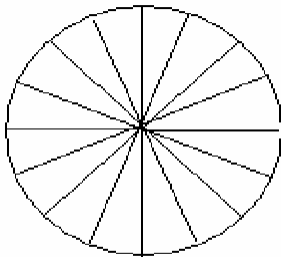


45 degree angle
 45° angle



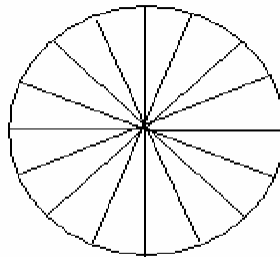
$22 \frac{1}{2}$ degree angle
 $22 \frac{1}{2}^{\circ}$ angle

Fractions



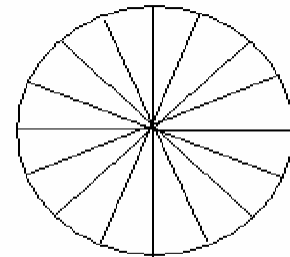
$\frac{1}{4}$ bend
one quarter bend

Color $\frac{1}{4}$ of the circle.



$\frac{1}{8}$ bend
one eighth bend

Color $\frac{1}{8}$ of the circle.



$\frac{1}{16}$ bend
one sixteenth bend

Color $\frac{1}{16}$ of the circle.

Activity #3: Can You Hand Me A . . . ?

Handout A



Conversation #1

A: Hey, _____,

B: Yeah? What do you need?

A: Can you **hand** me a 90° elbow?

B: Sure. Just a minute. (looks for fitting)
Here you go. (gives fitting to partner)

A: Thanks a lot.

B: You're welcome.

Conversation #2

A: Maria?

B: Yes. What is it?

A: Can you **get** me a floor flange?

B: Let me see. (looks for fitting and gives it
to his/her partner)
Here it is.

A: Thanks a lot.

B: No problem.

Activity #3: Can You Hand Me A . . . ?

Handout B



Conversation #1

A: Hey, _____,

B: Yeah? What do you need?

A: Can you **hand** me a 2 ½ inch tee?

B: Sure. Just a minute. (looks for fitting)

I only found one. (gives fitting to partner)

A: That's all I need.

B: Here you go. Do you need anything else?

Conversation #2

A: Maria?

B: Yes. What is it?

A: Can you **give** me a few locknuts?

B: How many?

A: Three or four will be enough.

B: Ok, let me look. (looks for fitting and gives it to partner)

I found some. Hold out your hand.

A: I got them. Thanks a lot.

B: No problem.

Activity #3: Can You Hand Me A . . . ?

Handout C



Conversation #1

A: Hey, _____,

B: Yeah? What do you need?

A: Can you **get** me a 1/8 bend from the truck?

B: Let me see if we have any. I'll be right back. (looks for fitting in truck)

I'm back. Okay, do you want the 3-inch or the
3 1/2 inch 1/8 bend?

A: I'll take the 3-inch one.

B: Can you get it? (Can you reach it?)

A: Got it. I appreciate it.

B: Let me know if you need anything else.

A: Thanks.

B: You're welcome.

Conversation #2

A: _____? Are you there?

B: Yes. What can I do for you?

A: Can you get me a copper double wye?

B: I'll look. Is it in the van?

A: I'm not sure.

B: Ok, let me look. (looks for fitting and show something to his/her
partner)

I found a PVC double wye, but I didn't see a copper one.

A: Okay. I'll need to go back to the shop.

B: I'll go get it for you.

A: Thanks, and bring me back a coke, too.

B: You owe me.