

PIPES AND FITTINGS



1. Explain the uses of each of the following types of pipe:

PVC _____

CPVC _____

PEX _____

Cast iron _____

Clay tile _____

Galvanized _____

Black iron _____

DATE COMPLETED: _____ **PASSED BY:** _____

2. Define the following terms:

Pipe schedule _____

Working pressure _____

Burst pressure _____

Temperature range _____

Sealant _____

PVC _____

DATE COMPLETED: _____ **PASSED BY:** _____

3. Explain how a pipe is connected to a fitting through the following methods:

Solder _____

Flare _____

Compression _____

Clamp _____

Barbed _____

Threaded _____

Glue and primer _____

DATE COMPLETED:

PASSED BY:

4. Match the fitting term with the correct fitting illustration.

a. Elbow

b. Street elbow

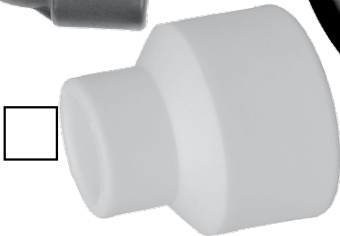
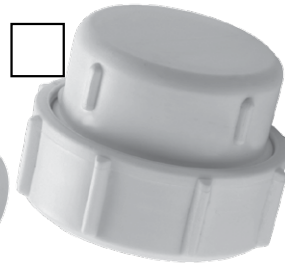
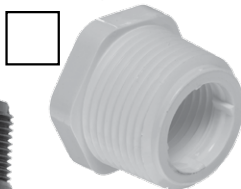
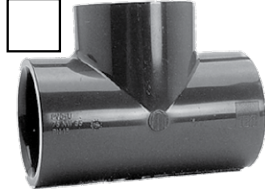
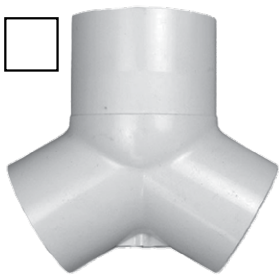
c. Cap

d. Tee

e. Wye

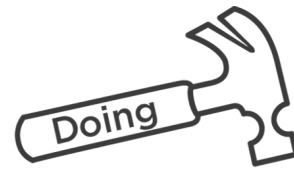
f. Coupling

g. Bushing



DATE COMPLETED:

PASSED BY:



Complete one of the following two options:

- Build three pipe projects out of plastic tubing and fittings. Suggestions include:
 - Marshmallow blow gun
 - Pop bottle rocket launcher
 - Ladder-ball apparatus game
 - Floor hockey goals
 - Water cannon
 - A separate project approved by your counselor

| PROJECT LOG | | |
|-------------|-------|-----------|
| Project | Date | Passed by |
| #1 _____ | _____ | _____ |
| #2 _____ | _____ | _____ |
| #3 _____ | _____ | _____ |

- Build one project out of plastic and a second project out of a type of metal. If the second project requires soldering, brazing, or welding, conduct these operations under the supervision of an adult who is experienced in the craft.

| PROJECT LOG | | |
|-------------|-------|-----------|
| Project | Date | Passed by |
| #1 _____ | _____ | _____ |
| #2 _____ | _____ | _____ |

BADGE APPROVED BY: _____

BADGE COMPLETED ON: _____