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Name: $\qquad$
School: $\qquad$
2019 Area IV \& VIII Ag.
Technology \& Mechanical Systems CDE

## Environmental and Natural Resource Skill Area

Points are based on your performance of proper procedures as well as skill activities. Please practice safe methods while completing these activities as some points may be allocated to safety. If you need any clarifications please ask for assistance. Read instructions carefully and thoroughly before completing each question or section.

Part 1 Directions- For this skill area you will need to assemble the sprinkler emitter components as specified.

## Specifications:

Emitter should be placed on $16^{\prime \prime}$ centers
Emitter length should be 12 "
Emitters use a maximum of 3 gph

## Materials:

$20^{\prime \prime} \mathrm{X} 1 / 2$ " diameter main line
$30^{\prime \prime} \mathrm{X} 1 / 4$ " diameter tubing
2 - sprinkler emitters
2 - barbed connectors
1 - block off connector

## Evaluation Criteria Earned

Correct sprinkler emitter length
Fitting installed correctly
Emitters installed in correct location
Block off is installed in correct location

Points Possible
Points

## 5

## 5

## 5

5
Points
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Total: $\qquad$

Part 2 Directions- Please look at the components or parts and respond to the questions with the most appropriate answers. (2 points each)

1. How many gallons of water are stored in a $100^{\prime}$ of $1 / 2^{\prime \prime}$ diameter tubing? 1 gallon $=231$ cubic inches.

Answer: $\qquad$
2. How many emitters will be used in $92^{\prime}$ of main line?

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\begin{aligned}
& \text { Answer: } \\
& \text { 3. What is the maximum amount of water flow needed for } 50 \text { sprinkler } \\
& \text { emitters? }
\end{aligned}
$$

Answer: $\qquad$
4. Do the emitters have a variable distance pattern?

Circle the correct answer Yes No
5. Do the sprinkler emitters use a compression type fitting?

Circle the correct answer
Yes
No

