Group members:

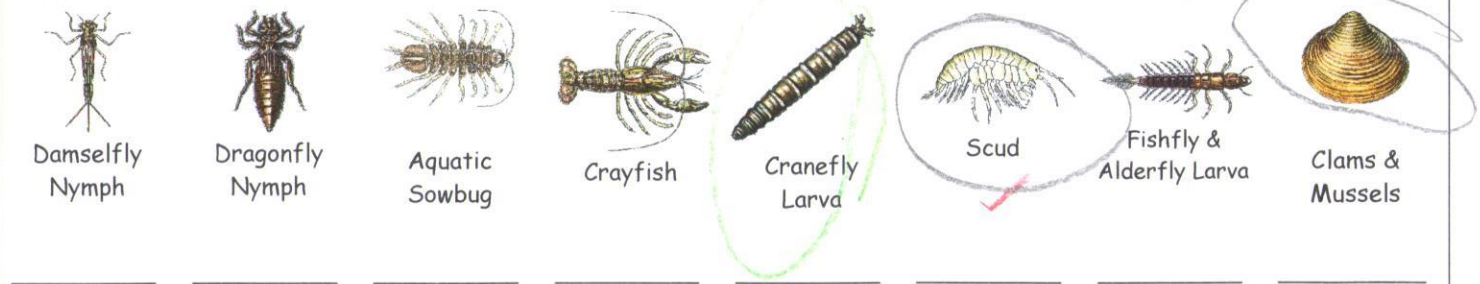
All 3 classes combined 3/23/18

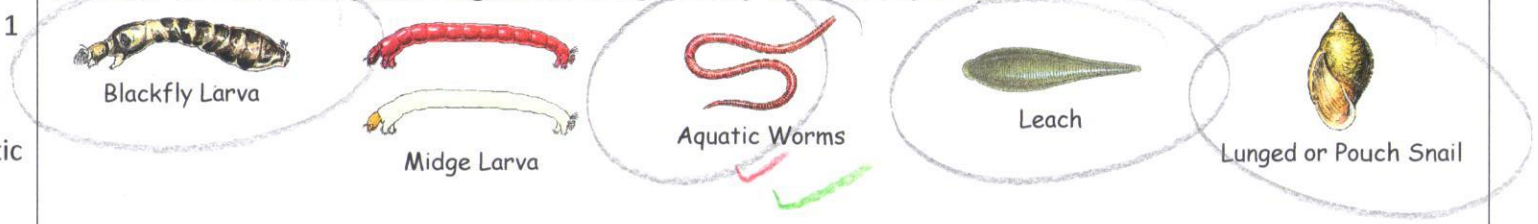
Your stream sample comes from: James River Upstream

DATA COLLECTION TABLE

NOT TO SCALE

Index Value	Pollution Tolerance Categories
Number of Circled Organisms 7 x 3 = 21 index value (ex. Multiple Mayflies count as 1 circled organism)	**GROUP 1: Sensitive** (These organisms are generally pollution-intolerant.)
Number of Circled Organisms 2 x 2 = 6 index value (ex. multiple Crane-Fly larvae count as 1 circled organism)	**GROUP 2: Somewhat Sensitive** (These organisms can exist in a wide range of water quality conditions.)
Number of Circled Organisms 4 x 1 = 4 index value (ex. multiple aquatic worms count as 1 circled organism)	**GROUP 3: Tolerant** (These organisms are generally tolerant of pollution.)





WATER QUALITY RATING

Total Index Value = 31

(Add up the numbers in the boxes above.)

Circle the appropriate Water Quality Rating

Excellent (>22) Good (17-22) Fair (11-16) Poor (<11)

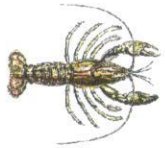
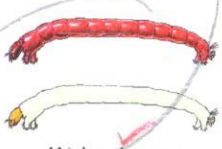
Group members:

All 3 classes combined: 3/23/18

Your stream sample comes from: James River Downstream

DATA COLLECTION TABLE

NOT TO SCALE

Index Value	Pollution Tolerance Categories
Number of Circled Organisms 4 x 3 = 12 index value (ex. Multiple Mayflies count as 1 circled organism)	**GROUP 1: Sensitive** (These organisms are generally pollution-intolerant.) Adult Riffle Beetle Hellgrammite (Dobsonfly Larva) Stonefly Nymph Most Caddis fly Larva Mayfly Nymph Water Penny Larva Gilled Snail
Number of Circled Organisms 3 x 2 = 6 index value (ex. multiple Crane-Fly larvae count as 1 circled organism)	**GROUP 2: Somewhat Sensitive** (These organisms can exist in a wide range of water quality conditions.) Damselfly Nymph Dragonfly Nymph Aquatic Sowbug  Crayfish Cranefly Larva Scud Fishfly & Alderfly Larva Clams & Mussels
Number of Circled Organisms 4 x 1 = 4 index value (ex. multiple aquatic worms count as 1 circled organism)	**GROUP 3: Tolerant** (These organisms are generally tolerant of pollution.) Blackfly Larva  Midge Larva Aquatic Worms Leach Lunged or Pouch Snail
WATER QUALITY RATING **Total Index Value =** 22 (Add up the numbers in the boxes above.)	Circle the appropriate Water Quality Rating: Excellent (>22) Good (17-22) Fair (11-16) Poor (<11)

Macroinvertabrate Lab Water Quality Results

	Upstream				Downstream			
	Group 1	Group 2	Group 3		Group 1	Group 2	Group 3	
Spring 2015	16	14	19	Good	16	19	20	Good
Fall 2015	15	21	17	Good	22	17	19	Good
Fall 2016	11	12	15	Fair	16	12	9	Fair
Spring 2017	12	11	18	Fair	18	12	17	Good
Fall 2017								