

Identifying Bacteria Lab – Marking Key

Name: _____

Background information:

Microbiology: 0 1
The study of micro-organisms

Characteristics of Bacteria: 0 1
Single celled prokaryotes

Drawing:

title of drawing 0 1
pencil 0 1
field of view 0 1
magnification 0 1
microscope number 0 1

Labels:

outside field of view 0 1
horizontal with ruler 0 1
bacteria types 0 1

Part B: Identifying bacteria

Correct classification of bacteria 0 1 2
Strep infection (tonsillitis) 0 1
Staph infection (boils/blisters on skin) 0 1

Discussion questions:

1. 0 1 2
Autotrophs – make their own food
Heterotrophs – consume food

2. 0 1 2
Binary fission – bacteria copy DNA and bacteria splits into 2 identical bacteria
Conjugation – bacteria exchange plasmid DNA with another bacteria – produces genetic variation.

3. 0 1
Endospores developed to withstand harsh environments like heat

4. 0 1 2 3 4 5 6
Symbiotic relationship – when two species live in close interaction
- Mutualism: both species benefit – ex/ large intestine bacteria
- Commensalism: one species benefits, the other is unaffected – ex/ bacteria on whales' teeth
- Parasitism: one species benefits, the other is harmed – ex/ lysteriosis

5. 0 1 2 3 4
Obligate aerobes – need oxygen to survive
Obligate anaerobes – live in environments with low or no oxygen
Faculative anaerobes – can live in environments with or without oxygen
Fermentation – when oxygen is unavailable – anaerobes obtain energy from sugars and produce alcohol as a byproduct.

Total: /29