

Name _____

Date _____

Period _____

40. A microscope views _____ things.
41. A telescope views _____ things.
42. Are the microscopes we use at school **light** microscopes or **electron** microscopes?
43. How high can the best light microscopes magnify up to?
44. What is a **monocular** microscope?
45. What is a **binocular** microscope?
46. Does the fact that a microscope is monocular or binocular have anything to do with its total magnification?
47. What type of microscope has a lower magnification, typically having a maximum of 20-40x?
48. How high can an electron microscope magnify things?
49. What is the magnification of our microscopes on low power?
50. What is the magnification of our microscopes on medium power?
51. What is the magnification of our microscopes on high power?
52. Suppose somebody had a microscope with a 5x ocular lens and a 25x objective lens. What would its total magnification be?
53. Suppose somebody had a microscope with a 10x ocular lens and a 30x objective lens. What would its total magnification be?

54. Sketch a microscope and label the 12 parts we identified in our notes (this question is 15 points, so don't skip it!).

55. Which knob is smaller on the microscope-- the *coarse* adjustment knob or the *fine* adjustment knob?

56. Which do you most when focusing—the *coarse* adjustment knob or the *fine* adjustment knob?

57. What is the purpose of the diaphragm on the microscope?

58. When carrying a microscope, you always want to hold it by what two parts?

59. In lab, several people saw a black “line” in their view. What was this?
60. Describe how things appear to move when using a microscope as compared to how you move the slide.
61. If you put an “e” on a slide facing normally, how will it look under the microscope?
62. What is meant by the term “field of view”?
63. What happens to the field of view on the microscope as you move up in magnification?
64. You are viewing an object on low power. What do you want to make sure and do before you go up to medium power?
65. You are wanting to view something on low power. What power do you start with?
66. You are wanting to view something on medium power. What power do you start with?
67. You are wanting to view something on high power. What power do you start with?
68. When we made our own slides of a piece of onion and a piece of you, what was that “blue stuff” and why did we use it?
69. Make a very brief sketch of what an onion cell (plant cell) looked like.
70. Make a very brief sketch of what one of your cells (animal cell) looked like.

71. In some cells, we saw some darker dots. What were those dots?

72. Name 3 positive roles of bacteria.

73. Name 3 negative roles of bacteria.

74. Name 3 positive roles of protists.

75. Name 3 negative roles of protists.

76. Name 3 positive roles of fungi.

77. Name 3 negative roles of fungi.

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78. Define adaptation.

79. Define structural adaptation.

80. Describe and give an example of protective coloration.

81. Describe and give an example of protective resemblance.

82. Define behavioral adaptation.

83. Give two examples of behavioral adaptations.

84. Define mimicry.

85. Give an example of where we might see mimicry in nature.