

# Review B3 Infection and Response

	Covered in class	Strength/weakness	Answered Exam Q	Kerboodle page
<b>3.1 Communicable diseases</b>				
Explain how diseases caused by viruses, bacteria, protists and fungi are spread in animals and plants.				<b>77</b>
Define the term pathogen				<b>76</b>
Explain how bacteria and viruses may reproduce in the body and why they make you feel ill				<b>76</b>
Give examples of how the spread of diseases can be reduced				<b>82</b>
Know that Measles is a viral disease and describe the symptoms				<b>84</b>
Explain the effects of HIV and how it is transmitted				<b>84</b>
Describe tobacco mosaic virus (TMV)				<b>85</b>
Know that Salmonella food poisoning is spread by bacteria ingested in food, or on food prepared in unhygienic conditions.				<b>86</b>
Describe the symptoms of salmonella food poisoning				<b>86</b>
Know how Gonorrhoea is transmitted and how its spread can be reduced.				<b>86</b>
Describe rose black spot and state its cause and how it can be treated				<b>88</b>
Describe malaria and state its cause				<b>89</b>
Know how malaria is spread and how to reduce the spread of the disease				<b>89</b>
Define some of body's natural defences to infection				<b>90</b>
Explain the role of white blood cells				<b>90</b>
Describe the process of vaccination				<b>98</b>
Explain "herd immunity"				<b>99</b>
State what antibiotics can treat and explain the development of antibiotic resistance bacteria				<b>100</b>
Define painkillers				<b>100</b>
Explain why it is difficult to develop drugs that kill viruses				<b>100</b>
Know that traditionally drugs were extracted from plants and microorganisms and give some common examples including who discovered Penicillin and from what				<b>102</b>
State that most new drugs are synthesised by chemists in the pharmaceutical industry. However, the starting point may still be a chemical extracted from a plant.				<b>104</b>
For new medicinal drugs explain the stages in preclinical and clinical trial				<b>104</b>
Define placebo				<b>105</b>
Explain double blind trials				<b>105</b>
<b>3.2 Monoclonal antibodies (biology only)</b>				
Explain how they are produced				<b>108</b>
Name uses of monoclonal antibodies both diagnostic and therapeutic				<b>108</b>
<b>3.3 Plant disease (biology only)</b>				
Know how plant disease is detected and identified				<b>94</b>
Plants can be infected by a range of viral, bacterial and fungal pathogens as well as by insects.				<b>94</b>
Plants can be damaged by a range of ion deficiency conditions:				<b>92</b>
Explain plant physical defence responses				<b>92</b>
Explain chemical plant defence responses				<b>92</b>
Explain plant mechanical defence adaptations.				<b>93</b>