

KS3 Assessment Rubric – SCIENCE – ORGANISMS, THEIR BEHAVIOUR & THE ENVIRONMENT

Year 7

Working Towards Age Expectations	Working At Age Expectations	Working Above Age Expectations
<ul style="list-style-type: none"> • Pupils use knowledge and understanding of organisms, their behaviour and the environment, such as the basic life processes of growth and reproduction, to describe similarities, differences and changes in the plants, animals, and non-living things they observe. • They use simple scientific ideas with evidence they have collected to give explanations of their observations, linking cause and effect, for example lack of light or water affecting plant growth and the ways in which animals or plants are suited to their environments. • They recognise and explain the purpose of a variety of scientific and technological developments in their everyday lives, for example medicines helping people get better when they are ill. 	<ul style="list-style-type: none"> • Pupils describe some processes and phenomena related to organisms, their behaviour and the environment, drawing on scientific knowledge and understanding and using appropriate terminology, for example using food chains to describe feeding relationships between plants and animals in a habitat. • They recognise that evidence can support or refute scientific ideas, such as in the identification and grouping of living things. • They recognise some applications and implications of science, such as the use of predators to control pest populations. 	<ul style="list-style-type: none"> • Pupils describe processes and phenomena related to organisms, their behaviour and the environment, drawing on abstract ideas and using appropriate terminology, for example the main functions of plant and animal organs and how these functions are essential. • They explain processes and phenomena, in more than one step or using a model, such as the main stages of the life cycles of humans and flowering plants. • They apply and use knowledge and understanding in familiar contexts, such as different organisms being found in different habitats because of differences in environmental factors. • They recognise that both evidence and creative thinking contribute to the development of scientific ideas, such as the classification of living things. • They describe applications and implications of science, such as solving some of the health problems that arise when organ damage occurs.

Year 8

Working Towards Age Expectations	Working At Age Expectations	Working Above Age Expectations
<ul style="list-style-type: none"> • Pupils describe some processes and phenomena related to organisms, their behaviour and the environment, drawing on scientific knowledge and understanding and using appropriate terminology, for example using food chains to describe feeding relationships between plants and animals in a habitat. • They recognise that evidence can support or refute scientific ideas, such as in the identification and grouping of living things. • They recognise some applications and implications of science, such as the use of predators to control pest populations. 	<ul style="list-style-type: none"> • Pupils describe processes and phenomena related to organisms, their behaviour and the environment, drawing on abstract ideas and using appropriate terminology, for example the main functions of plant and animal organs and how these functions are essential. • They explain processes and phenomena, in more than one step or using a model, such as the main stages of the life cycles of humans and flowering plants. • They apply and use knowledge and understanding in familiar contexts, such as different organisms being found in different habitats because of differences in environmental factors. • They recognise that both evidence and creative thinking contribute to the development of scientific ideas, such as the classification of living things. • They describe applications and implications of science, such as solving some of the health problems that arise when organ damage occurs. 	<ul style="list-style-type: none"> • Pupils describe processes and phenomena related to organisms, their behaviour and the environment, using abstract ideas and appropriate terminology, for example simple cell structure and function. • They take account of a number of factors or use abstract ideas or models in their explanations of processes and phenomena, such as environmental factors affecting the distribution of organisms in habitats. • They apply and use knowledge and understanding in unfamiliar contexts, such as a food web in a habitat. • They describe some evidence for some accepted scientific ideas, such as the causes of variation between living things. • They explain the importance of some applications and implications of science, such as the use of selective breeding.

Year 9

Working Towards Age Expectations	Working At Age Expectations	Working Above Age Expectations
<ul style="list-style-type: none"> • Pupils describe processes and phenomena related to organisms, their behaviour and the environment, drawing on abstract ideas and using appropriate terminology, for example the main functions of plant and animal organs and how these functions are essential. • They explain processes and phenomena, in more than one step or using a model, such as the main stages of the life cycles of humans and flowering plants. • They apply and use knowledge and understanding in familiar contexts, such as different organisms being found in different habitats because of differences in environmental factors. • They recognise that both evidence and creative thinking contribute to the development of scientific ideas, such as the classification of living things. • They describe applications and implications of science, such as solving some of the health problems that arise when organ damage occurs. 	<ul style="list-style-type: none"> • Pupils describe processes and phenomena related to organisms, their behaviour and the environment, using abstract ideas and appropriate terminology, for example simple cell structure and function. • They take account of a number of factors or use abstract ideas or models in their explanations of processes and phenomena, such as environmental factors affecting the distribution of organisms in habitats. • They apply and use knowledge and understanding in unfamiliar contexts, such as a food web in a habitat. • They describe some evidence for some accepted scientific ideas, such as the causes of variation between living things. • They explain the importance of some applications and implications of science, such as the use of selective breeding. 	<ul style="list-style-type: none"> • Pupils describe a wide range of processes and phenomena related to organisms, their behaviour and the environment, using abstract ideas and appropriate terminology and sequencing a number of points, for example respiration and photosynthesis, or pyramids of biomass. • They make links between different areas of science in their explanations. They apply and use more abstract knowledge and understanding, in a range of contexts, such as inherited and environmental variation. • They explain how evidence supports some accepted scientific ideas, such as the structure and function of cells. • They explain, using abstract ideas where appropriate, the importance of some applications and implications of science, such as the uses of cells in stem cell research.