



Sensor	Code	What apparatus can sensor be used in conjunction with or enhance?	Possible Experiments	Level
Carbon dioxide	900-130	Photosynthesis Teaching Model (niC)	Anything connected to photosynthesis;	KS3, KS4, KS5
		Investigating photosynthesis (124) and Microslide set (p124); O ₂ ; humidity and light sensors		
		Teaching Cell Respiration (p64)	Experiments on respiration at all levels including germination of seeds	KS3, KS4, KS5
Oxygen	900-105	Photosynthesis Teaching Model (niC)	Anything connected to photosynthesis;	KS3, KS4, KS5
		Investigating photosynthesis (124) and Microslide set (p124); CO ₂ ; humidity and light sensors; soil moisture sensor		
		Teaching Cell Respiration (p64); CO ₂ Sensor humidity Sensors	Experiments on respiration;	KS3, KS4, KS5
		pH sensor; turbidity and light sensors	Experimental fieldwork where variations in oxygen levels, for example in fresh water can be investigated.	KS5 mostly
Spirometer	900-126	Lung volume kit on p.91; The breathing fitness lab (p.92); Heart fitness lab (p.92);	Measure the FEV1 of individuals before and after exercise. A good measure of fitness levels.	KS3, KS4, KS5
UVB	900-140	Quartz cuvettes containing material of interest e.g. DNA	Examine the efficacy of different sun blockers	KS5
UVA	900-142	Plastic Film	Examine the efficacy of different sun blockers	KS5
		Cuvettes; skin model(s) p.108	Measure levels of NADH in a solution	KS5
Temperature	900-103	Any of the above sensors	Effect of temperature on photosynthesis or respiration	KS4, KS5
Heart and pulse monitor	900-108	Functioning heart and circulatory system (p103) Heart fitness lab (p.92); Lung volume kit on p.91; The breathing fitness lab (p.92); Heart model(s) p. 112; Human torso (p.102); stethoscope (p.112)	Measure the pulse rate of individuals before and after exercise. A good measure of fitness levels.	KS3, KS4, KS5
			Look at the pattern of the heart beat to illustrate systole and diastole	KS4, KS5
EKG	900-128	Heart fitness lab (p.92); Heart model(s) p. 112; Human torso (p.102); stethoscope (p.112)	Look at EKG patterns before and after exercise.	KS5
turbidity	900-141	Filtration apparatus; O ₂ and CO ₂ sensors	On field trip look at turbidity as an abiotic factor	KS5
Soil moisture	900-139	Du-all box (NiC); Use along with CO ₂ and oxygen sensors	The germination of seeds under different conditions	KS4 and KS5
Respiration	900-146	Functioning heart and circulatory system (p103) Heart fitness lab (p.92); Lung volume kit on p.91; The breathing fitness lab (p.92); Heart model(s) p. 112; Human torso (p.102);	Any experiment that involves respiration	KS3, KS4, KS5
Blood pressure	900-132	Functioning heart and circulatory system (p103) Heart fitness lab (p.92); Lung volume kit on p.91; The breathing fitness lab (p.92); Heart model(s) p. 112; Human torso (p.102);stethoscope (p.112)	Look at blood pressure before and after exercise	KS4, KS5
Galvanic skin response	900-127	Brain models p107; endocrine system model activity set p105; human torso models p102; As part of forensics investigation kits in solving crimes.	Look at aspects of the autonomic nervous system and how we react to various stimuli	KS4, KS5
Light	900-104	Photosynthesis Teaching Model (niC)	Anything connected to photosynthesis;	KS3, KS4, KS5
		Investigating photosynthesis (124) and Microslide set (p124); O ₂ ; humidity and light sensors		