P1 – Infra-red and Kinetic Energy Quiz

1. Why is it best to paint the outside of a metal cooking pot black?

2. Why does a cooking pot have a lid?

3. Why is a car radiator painted black?

4. Explain why thermal imaging cameras work better at night than during the day.

5. What is the name given to heat transfer from particle to particle?

6. What name is given to the heat transfer by the movement of hot liquids?

7. Why is the outside of a fire fighter's suit shiny?

8. How is heat transferred through a metal?

9. Why are radiators painted white and not black?

10. How does the Sun transfer heat?

11. A bag is filled with water and placed in the Sun. What colour should the bag be so that the water can be warmed?

12. Which methods of heat transfer are reduced by a vacuum?

13. Which method of heat transfer is reduced by silver surfaces?

14. Which methods of heat transfer are reduced by plastic caps?

15. Why does a fridge have a white shiny surface?

16. How is energy transferred from the base of a sauce pan to the water inside the pan?

17. What is thermal radiation?

18. Why does warm water freeze quicker inside a freezer than cold water?

19. Why does 1kg of a gas have a larger volume than 1 kg of a solid?

20. Why does the temperature of a liquid decrease as the liquid evaporates?

21. Why does sweating cool you down?

22. How can you speed up evaporation?

23. Describe the arrangement of particles in solids, liquids and gases.

24. What is the ideal weather for drying clothes outside?