



# DENTAL RADIATION CERTIFICATION

## UNIT 4: Dental Film TOPIC B: Film Processing

1. The two solutions needed to process x-rays include \_\_\_\_\_ and \_\_\_\_\_.
2. The developer \_\_\_\_\_ the invisible ( \_\_\_\_\_ ) image on the film into a visible image. This process is called \_\_\_\_\_.
3. The developer changes the exposed ( \_\_\_\_\_ ) silver halide crystals to \_\_\_\_\_ metallic silver.
4. The areas in the mouth that are \_\_\_\_\_ dense get more radiated on the film, and that radiation \_\_\_\_\_ the silver halide crystals. The developer then changes the energized silver crystals to \_\_\_\_\_ metallic silver.
5. That area is then the \_\_\_\_\_ areas on the film.
6. The fixer \_\_\_\_\_ the unexposed (unenergized) silver halide crystals from the emulsion and therefore creates \_\_\_\_\_ or \_\_\_\_\_ areas on the dental radiograph.
7. The \_\_\_\_\_ flows through the large tank for manual processing. Then the \_\_\_\_\_ and the \_\_\_\_\_, in separate smaller compartments, get put into the large tank.
8. Films are put into the \_\_\_\_\_ solution first, then move them to the \_\_\_\_\_, then move them to the \_\_\_\_\_, then let them dry before mounting.
9. Which compartment is therefore responsible for monitoring the temperature of the solutions? \_\_\_\_\_
10. Everything in dentistry sets up \_\_\_\_\_ with heat.
11. The ideal temperature of the solutions in manual processing is \_\_\_\_\_.
12. When film is exposed to \_\_\_\_\_ light they turn completely \_\_\_\_\_.
13. The safety light in the dark room needs to be at least \_\_\_\_\_ feet from the working counter so that the light won't expose the x-ray film.
14. Processing chemicals give off \_\_\_\_\_ fumes, therefore a \_\_\_\_\_ was a requirement.
15. What extra component to the automated processor do you need if you don't have a darkroom and need to develop x-rays? \_\_\_\_\_
16. How often should processing solutions be changed? \_\_\_\_\_ or \_\_\_\_\_
17. Water should be changed \_\_\_\_\_.
18. How often should the solutions be replenished? \_\_\_\_\_
19. When films are underdeveloped they will appear \_\_\_\_\_ and when they are overdeveloped they will appear \_\_\_\_\_.
20. Developing time can change the \_\_\_\_\_ of the film just as mAs do.

21. \_\_\_\_\_ is when the film gets excess heat and the \_\_\_\_\_ move in the emulsion prior to or during processing.
22. Developer spots will cause \_\_\_\_\_ spots and fixer spots will cause \_\_\_\_\_ spots.
23. Half-moon shaped marks on x-ray films are probably caused from \_\_\_\_\_.
24. Developer cut-off will cause part of the film to be \_\_\_\_\_. Fixer cut-off will cause part of the film to be \_\_\_\_\_.
25. Static electricity marks on x-rays is from the film packet being opened too \_\_\_\_\_.

**NEXT UP: Unit 4 Topic C: Film Mounting**