## Interior and Exterior Painting

Many types of paint exist, catering to <u>NHS FPX 4000 Assessment 4 Analyzing a Current Health Care</u> <u>Problem or Issue</u> different surfaces and aesthetic preferences. However, all paints have the same basic components: pigments, solvents, additives and resins.Resins are quick-evaporating liquids that keep binders and pigments in suspension until the paint dries. Additives control things like dry time, leveling and mildew resistance.

All paints contain the same basic ingredients: pigments, resins, solvents and additives. Pigments are finely ground materials that give paint its color, either naturally-derived (like titanium oxide or carbon black) or synthetically made. Resins act as binding agents to help paint adhere to surfaces. Solvents, which evaporate as the paint dries, can be water (in latex and acrylic paints) or mineral spirits in oil-based paints. Additives give paint specific properties, such as smoothing brush strokes or inhibiting mold growth.

In addition to these key components, paints also have thickeners to create different sheens like matte, satin, eggshell and semi-gloss, and fungicides to protect against mildew. Interior and exterior paints have to <u>NHS FPX 4000 Assessment 3 Applying Ethical</u> <u>Principles</u> be able to hold up to different environments, too, so each has to be formulated differently. For example, exterior paint uses a hardier resin to resist fading and cracking than the binding resin used in interior paint. This type of paint also uses more additives to ensure it's resistant to moisture and withstands weather changes.

The paint world has been buzzing for years with a trend toward healthier house paints. These are often referred to as low-odor or low-VOC (Volatile Organic Compounds) paints. They have fewer or no VOCs and therefore off-gas fewer harmful chemicals.

VOCs are present in all solvent-based and some water-based paints and are responsible for that strong "new paint" smell. They help the paint adhere to surfaces and also assist in the drying process. However, once the paint dries, they release vapors that off-gas into the air.

These vapors can cause respiratory issues, eye irritation and even damage the environment. They can contribute to the <u>NHS FPX4000 Assessment 1 Pledge of Academic Honesty</u> formation of ground-level ozone, which triggers plant diseases, reduces seed production and obstructs fertilization.

The good news is, if you use proper ventilation during painting, these harmful vapors will evaporate more quickly. This is why it's important to open windows and run exhaust fans when using products that contain VOCs. These include paints, carpet cleaners and many cleaning products.

The adhesion of paint to the wall is what makes or breaks a painting job. A good paint job requires properly cleaning the surface, sanding (if needed) and priming to prepare it for proper adhesion.

The raw materials in interior and exterior paints are similar: water, binder, filler, pigment and additives. The binder is the non-volatile film-forming component that impacts the physical/mechanical properties of a paint, and it is what creates the bond between a paint and the substrate.

Exterior paints are formulated to withstand outdoor conditions and must be durable, dirt-repellent and resistant to mildew growth <u>NHS FPX4000 Assessment 2 Applying Library</u> <u>Research Skills</u> and humidity. While this doesn't mean that the ingredients are not safe for use in the home, they may be more volatile than interior paints.

One of the most common issues homeowners encounter after having their walls painted is that they soon notice the paint color fading from the wall. There are many reasons why this happens, but the most important is direct sunlight. The UV rays from the sun cause the pigments to break down and fade the paint.

Interior paint doesn't have to deal with harsh weather, debris or changing temperatures like exterior wall paint, so it doesn't have additives that help it resist fading. However, exterior paints do have additives that allow them to be waterresistant and mildew-resistant.

These additives change the way the pigment molecule works so that it doesn't absorb light and becomes dull. You can also prevent your paint from fading by keeping the windows closed during the times of day when damaging rays shine directly on the wall. You can do this by installing blinds or curtains in the window area. This will help you keep the paint job vibrant for years to come.