

## **What Are Meteors?**

Meteor is just a fancy word for ‘falling star’, but falling stars aren’t really stars. Meteors burn and give off light when they fall through the sky and they look like stars and this is why people started calling them falling stars. A meteor is really a big rock from space. The space rock also known as an asteroid or meteoroid travels long distances through space and by chance crosses its path with our planet. When it enters Earth’s skies it slows down and starts to burn. As it descends towards the surface the heat and pressure against it cause it to break up and sometimes explode. When this happens the big rock breaks up into little rocks and the little rocks fall to the Earth. These rocks are called meteorites. Most meteorites are made out of stone and metal and are considered to be very rare – more rare than gold or even diamonds.

## **Why Do People Want Meteorites**

Meteorites are very important to scientists and universities because these people study them to learn new things about our planet and the universe. Museums like to display meteorites so that people can have an opportunity to look at them and learn more about them. There are lots of people that like to collect and buy meteorites as a hobby. Other people make jewelry out of meteorites. Meteorites are precious stones that provide value to different people in different ways.

## **How Much Do Meteorites Cost**

The cost of meteorites first depends on the type of meteorite it is. Most meteorites are made of stone and metal and fall into the common category. In some very rare cases the type of meteorite is extra special and these will cost much more. The next factor that affects cost is the condition. Meteorites rust while they sit on the wet ground and this rust affects the value (that’s why its good to find them fast). Currently the price of stony meteorites can range from as little as \$1-\$5 per gram to \$30-\$50. A meteorite the size of your fingernail could range in price from \$10 - \$500. Ultimately meteorites are worth what someone is willing to pay for them.

## **What is the Mason Dixon Meteor?**

The Mason Dixon Meteor is the name for a meteor that flew to our planet from space on July 6, 2009 at 1:04 AM. The meteor entered high in the sky over Baltimore and descended on a North Eastern path. It broke apart and fell to the ground somewhere East of Lancaster Pennsylvania. Scientists from around the world have been studying videos and pictures of the fireball as well as other information and they have been able to pinpoint the location of the meteorites to a precise area.

## How To Find Meteorites

Looking for meteorites is a fun and pretty easy thing to do. It is a great activity to do with family, friends and children. Kids love hunting for meteorites. Here are some instructions on how to look for meteorites that Meteor Hunter Steve Arnold sent me:

Step 1. Look downward for black rocks

Step 2. Repeat

Obviously he was kidding, but that really is about it. I researched this a little and came up with a few more tips:

- 1) Walk in a straight line across the property and scan a 4 foot wide area. After you get experienced you can try and open up that area wider, but its best to start with a small field of view.
- 2) You are looking for smooth heavy black magnetic rocks, there are some earth rocks that are black so don't get too excited when you find your first black rock (it could be nothing). If you aren't sure keep the rock anyway. You can have someone look at it later to let you know for sure. If its heavy, smooth, black and magnetic there is a good chance its a meteorite.
- 3) Because meteorites contain metal they can rust, they are also magnetic. Some earth rocks are magnetic too so this test is not a guarantee.
- 4) Once you've found a black rock pick it up and test it with a magnet. If it is black and magnetic you could be in luck. It will also be very heavy and denser than a normal rock.
- 5) Don't go on private property without permission. Instead look in free places, like parks, parking lots and the side of the road or ask the land owners for permission to search on their property.
- 6) Magnet on a string is a good trick. Buy some donut shaped magnets. Tie a string around them. As you are walking around you can move the magnet over the rocks on the ground. This will save you time and pain of bending over or reaching down hundreds of times. You can also nail the magnet to the end of a walking stick. Or tie multiple magnets to a broomstick, attach it to a vehicle and then drag it across the property. If you are searching a big farm this is probably the best bet.
- 7) If you can afford it a metal detector is a valuable asset for meteorite hunting... But it is not mandatory. Lots of meteorite hunters just use their eyes.
- 8) A strewn field is the area around an impact zone. This is where the most meteorite rock will be. This is what we are looking for in PA. I have talked to lots of hunters and they tell me because of its size the strewn field for the Mason Dixon Meteor could have hundreds of meteorites in it.

Good luck. If you find any of the Mason Dixon meteorites please contact me. -- Mike