

1  
00:00:07,719 --> 00:00:11,339  
Your guide to constellations, deep-sky objects,

2  
00:00:11,339 --> 00:00:16,140  
planets, and events: Tonight's Sky.

3  
00:00:16,140 --> 00:00:23,399  
Highlights of the December sky:

4  
00:00:38,020 --> 00:00:42,160  
Look for Saturn low in the southwestern sky at dusk,

5  
00:00:42,159 --> 00:00:45,919  
early in the month.

6  
00:00:53,799 --> 00:00:56,640  
Its iconic rings are clearly visible with

7  
00:00:56,640 --> 00:00:59,820  
backyard telescopes in early December.

8  
00:00:59,820 --> 00:01:01,439  
But by the middle of the month,

9  
00:01:01,439 --> 00:01:07,480  
the planet slips into the glare of the Sun.

10  
00:01:16,980 --> 00:01:19,980  
Mars glints red in the southwestern sky

11  
00:01:19,980 --> 00:01:27,320  
against the stars of Sagittarius.

12  
00:01:27,319 --> 00:01:36,119  
Modest telescopes readily reveal its other disk.

13  
00:01:46,540 --> 00:01:49,620  
Two prominent constellations in the December night

14  
00:01:49,620 --> 00:01:52,700  
sky represent notable individuals of

15  
00:01:52,700 --> 00:01:58,079  
ancient Greek mythology.

16  
00:01:59,859 --> 00:02:03,859  
The great hero Perseus holds the head of Medusa

17  
00:02:03,859 --> 00:02:08,139  
the Gorgon.

18  
00:02:08,139 --> 00:02:12,139  
Located in Perseus is M34, an

19  
00:02:12,139 --> 00:02:17,379  
open star cluster about 1,400 light-years away from us.

20  
00:02:17,379 --> 00:02:20,719  
Open star clusters are groups of young stars

21  
00:02:20,719 --> 00:02:22,840  
that all formed at the same time

22  
00:02:22,840 --> 00:02:29,080  
within a large cloud of dust and gas.

23  
00:02:29,080 --> 00:02:32,400  
Look for it with the naked eye or with binoculars

24  
00:02:32,400 --> 00:02:37,659  
in a dark sky.

25  
00:02:52,800 --> 00:02:56,240  
Queen Cassiopeia was punished for her conceit

26  
00:02:56,240 --> 00:03:02,560  
and vanity by being tied to her throne.

27  
00:03:04,919 --> 00:03:07,839  
Cassiopeia's "M" or "W" shape

28  
00:03:07,840 --> 00:03:13,020  
makes this constellation easy to identify.

29

00:03:13,020 --> 00:03:16,580  
Eta Cassiopeiae is a wonderful and colorful

30  
00:03:16,580 --> 00:03:18,300  
double star.

31  
00:03:18,300 --> 00:03:20,740  
Use binoculars or a small telescope

32  
00:03:20,740 --> 00:03:28,540  
to discern its gold and blue hues.

33  
00:03:28,539 --> 00:03:33,879  
M103 in Cassiopeia is a fine open star cluster

34  
00:03:33,879 --> 00:03:39,400  
with a prominent red star near the center.

35  
00:03:39,400 --> 00:03:47,599  
Its fan shape is evident in binoculars.

36  
00:03:47,599 --> 00:03:50,780  
Lying between Cassiopeia and Perseus

37  
00:03:50,780 --> 00:03:53,979  
is the lovely Double Cluster.

38  
00:03:53,979 --> 00:03:56,560  
This pair of open star clusters is

39  
00:03:56,560 --> 00:03:59,599  
easy to see with binoculars.

40  
00:03:59,599 --> 00:04:03,659  
The Double Cluster resembles a handful of diamonds

41  
00:04:03,659 --> 00:04:11,500  
scattered on black velvet, with a ruby in between.

42  
00:04:25,519 --> 00:04:28,620  
Look for Venus blazing in the eastern sky

43  
00:04:28,620 --> 00:04:32,120

before the chilly December sunrise.

44

00:04:32,120 --> 00:04:35,040

In the middle of the month, diminutive Mercury

45

00:04:35,040 --> 00:04:39,040

joins Venus in the morning sky, popping briefly

46

00:04:39,040 --> 00:04:45,360

above the eastern horizon before the Sun.

47

00:04:47,819 --> 00:04:49,399

A modest telescope

48

00:04:49,399 --> 00:04:52,560

will show both disks in their moon-like phases,

49

00:04:52,560 --> 00:05:00,920

as we see only part of their sunlit sides.

50

00:05:09,779 --> 00:05:11,719

The mid-December night sky

51

00:05:11,720 --> 00:05:15,960

hosts the lovely Geminid meteor shower.

52

00:05:15,959 --> 00:05:20,639

The shower peaks on the night of December 13 to 14.

53

00:05:20,639 --> 00:05:24,399

Under a dark sky, you could see as many as

54

00:05:24,399 --> 00:05:30,799

60 colorful meteors per hour.

55

00:05:30,800 --> 00:05:35,540

The night sky is always a celestial showcase.

56

00:05:35,540 --> 00:05:45,420

Explore its wonders from your own backyard.