



1
00:00:15,350 --> 00:00:14,070
a protective paint used on the statue of

2
00:00:18,710 --> 00:00:15,360
liberty

3
00:00:21,109 --> 00:00:18,720
a tiny laser that unclogs arteries

4
00:00:23,269 --> 00:00:21,119
and for the disabled a vehicle control

5
00:00:25,189 --> 00:00:23,279
system like the lunar rovers

6
00:00:29,429 --> 00:00:25,199
these are just a few of many products

7
00:00:34,069 --> 00:00:31,750
this eye testing device in use at a

8
00:00:35,990 --> 00:00:34,079
kinder care learning center has recently

9
00:00:38,709 --> 00:00:36,000
been developed by the medical sciences

10
00:00:41,030 --> 00:00:38,719
corporation in wadaway alabama

11
00:00:43,430 --> 00:00:41,040
called the ocular screening system it is

12
00:00:44,950 --> 00:00:43,440
based on technology used by nasa's

13
00:00:47,750 --> 00:00:44,960

marshall space flight center in

14

00:00:50,150 --> 00:00:47,760

huntsville alabama to analyze pictures

15

00:00:53,430 --> 00:00:50,160

like this one of the sun taken during

16

00:00:55,670 --> 00:00:53,440

skylab missions in the early 1970s

17

00:00:58,069 --> 00:00:55,680

ocular screening provides a simple

18

00:01:00,150 --> 00:00:58,079

reliable way to detect eye problems in

19

00:01:03,029 --> 00:01:00,160

young children problems which could be

20

00:01:05,030 --> 00:01:03,039

incurable if not treated early

21

00:01:08,230 --> 00:01:05,040

the pictures produced by the system look

22

00:01:10,149 --> 00:01:08,240

like this a totally red eye is healthy

23

00:01:13,190 --> 00:01:10,159

white crescents or other variations

24

00:01:15,350 --> 00:01:13,200

indicate problems eight to ten percent

25

00:01:17,590 --> 00:01:15,360

of the children tested so far have been

26

00:01:19,990 --> 00:01:17,600

found to have serious eye diseases or

27

00:01:23,429 --> 00:01:20,000

abnormalities according to kinder care

28

00:01:26,070 --> 00:01:23,439

educational specialist jenny folsom

29

00:01:28,149 --> 00:01:26,080

with young children it's virtually

30

00:01:30,710 --> 00:01:28,159

impossible to be able to tell you that

31

00:01:32,710 --> 00:01:30,720

something is wrong but uh this technique

32

00:01:34,310 --> 00:01:32,720

is so innovative in that even our

33

00:01:36,469 --> 00:01:34,320

infants can

34

00:01:39,270 --> 00:01:36,479

focus at the camera and the photograph

35

00:01:41,590 --> 00:01:39,280

will display any defects that are

36

00:01:43,429 --> 00:01:41,600

apparent there with no response from the

37

00:01:44,950 --> 00:01:43,439

child required

38

00:01:45,910 --> 00:01:44,960

and how do the kids feel about the

39

00:01:47,429 --> 00:01:45,920

testing

40

00:01:50,469 --> 00:01:47,439

it's just like you're having your

41

00:01:54,710 --> 00:01:52,710

nasa technology is making an impact in

42

00:01:57,270 --> 00:01:54,720

another area as well

43

00:02:00,230 --> 00:01:57,280

more accurately it's absorbing impact

44

00:02:03,030 --> 00:02:00,240

and a new line of running shoes

45

00:02:05,350 --> 00:02:03,040

running's popularity continues to grow

46

00:02:09,430 --> 00:02:05,360

and the constant pounding can be broken

47

00:02:13,750 --> 00:02:11,670

to help soften the blow the kangaroo

48

00:02:16,229 --> 00:02:13,760

shoe company headquartered in st louis

49

00:02:18,869 --> 00:02:16,239

missouri has developed a running shoe

50

00:02:25,110 --> 00:02:18,879

that incorporates a nasa material like

51
00:02:29,750 --> 00:02:27,510
this springy fibrous material is filled

52
00:02:33,430 --> 00:02:29,760
with polyurethane and placed in the

53
00:02:37,750 --> 00:02:36,070
dr joseph hamill assistant professor and

54
00:02:40,070 --> 00:02:37,760
director of biomechanics at the

55
00:02:42,630 --> 00:02:40,080
university of massachusetts amherst

56
00:02:44,949 --> 00:02:42,640
specializes in testing running shoes

57
00:02:47,750 --> 00:02:44,959
according to dr hamel dynacoil not only

58
00:02:51,270 --> 00:02:47,760
absorbs shock very well it also helps

59
00:02:53,589 --> 00:02:51,280
control side to side movement

60
00:02:57,110 --> 00:02:53,599
the high speed video system he uses in

61
00:02:59,190 --> 00:02:57,120
his labs helps illustrate this point

62
00:03:01,750 --> 00:02:59,200
when we run our feet don't just hit the

63
00:03:04,869 --> 00:03:01,760

ground and bounce straight back up

64

00:03:07,350 --> 00:03:04,879

they hit roll over from outside to in

65

00:03:08,550 --> 00:03:07,360

then come back up again this is called

66

00:03:11,589 --> 00:03:08,560

pronation

67

00:03:13,509 --> 00:03:11,599

if a foot over-pronates injury can occur

68

00:03:16,710 --> 00:03:13,519

and until now no shoe had ever

69

00:03:18,390 --> 00:03:16,720

controlled this motion so well

70

00:03:20,869 --> 00:03:18,400

what we're always seeking is um new

71

00:03:27,350 --> 00:03:20,879

materials and if nasa has them and they