

## Nissan develops paint to keep cars cooler

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Japanese car maker Nissan has developed a new type of paint that keeps cars cooler. The paint lowers the temperature inside cars that are parked in sunlight. The paint can keep a car 12°C cooler than cars with regular paint. The

new paint will also reduce the need for air conditioning. This means there is less pressure on a car's battery. The paint was developed in partnership with a Chinese company called Radi-Cool, a specialist in heat-cooling products. Nissan said: "The project is part of [our] pursuit of...innovations that empower journeys, and help create a cleaner, more sustainable society." The paint is currently only available in white. Nissan hopes to make other colours in the future.

The leader of the "cool paint" project is Dr Susumu Miura. He is a manager at the Nissan Research Center near Tokyo. His team started developing the paint in 2021. Their current paint is about six times thicker than standard automotive paint. This will make cars a little more expensive. Dr Miura spoke about his work. He said: "My dream is to create cooler cars without consuming energy." He added: "This is especially important in the electric vehicle era, where the load from running air-conditioning in summer can have a sizeable impact on the [condition of the battery]." He hopes vehicles like ambulances that spend most of the day out driving will have the paint.

Sources: [asahi.com](https://www.asahi.com) / [msn.com](https://www.msn.com) / [nissannews.com](https://www.nissannews.com)

### Writing

Everything should be painted in cool paint to lower energy use. Discuss.

### Chat

Talk about these words from the article.

car maker / paint / cool / sunlight / air conditioning / battery / project / journey / manager / team / expensive / dream / energy / electric vehicle / ambulance / driving

### True / False

- 1) The paint keeps cars warm in winter. T / F
- 2) The cool paint keeps cars that are in sunlight about 12 degrees cooler. T / F
- 3) The cool paint means there is less pressure on the car's battery. T / F
- 4) Nissan has no plans to create the paint in colours other than white. T / F
- 5) The paint has been in development for 10 years. T / F
- 6) The cool paint is six times thinner than standard car paint. T / F
- 7) The researcher's dream is to create cars that don't need air-con. T / F
- 8) The researcher wants ambulances to use the new cool paint. T / F

### Synonym Match

(The words in **bold** are from the news article.)

- |                     |                |
|---------------------|----------------|
| 1. <b>type</b>      | a. head        |
| 2. <b>lowers</b>    | b. requirement |
| 3. <b>need</b>      | c. automobiles |
| 4. <b>pressure</b>  | d. trips       |
| 5. <b>journeys</b>  | e. reduces     |
| 6. <b>leader</b>    | f. regular     |
| 7. <b>standard</b>  | g. large       |
| 8. <b>expensive</b> | h. kind        |
| 9. <b>sizeable</b>  | i. costly      |
| 10. <b>vehicles</b> | j. stress      |

### Discussion – Student A

- a) What do you think about what you read?
- b) What do you think of Japanese cars?
- c) Should we paint houses and streets with this paint?
- d) What would it be like to be a researcher for a car company?
- e) What's the best car company in the world?
- f) What other products need to be cool?
- g) What's your favourite car, and why?
- h) What questions would you like to ask Nissan bosses?

## Phrase Match

- |  |                                 |
|--|---------------------------------|
| 1. The paint lowers the                  | a. developing the paint in 2021 |
| 2. This means there is less pressure on  | b. sustainable society          |
| 3. developed in partnership              | c. vehicle era                  |
| 4. create a cleaner, more                | d. temperature inside cars      |
| 5. Nissan hopes to make other colours in | e. without consuming energy     |
| 6. His team started                      | f. with a Chinese company       |
| 7. about six times thicker than standard | g. of the day out driving       |
| 8. My dream is to create cooler cars     | h. the future                   |
| 9. in the electric                       | i. automotive paint             |
| 10. ambulances that spend most           | j. a car's battery              |

## Discussion – Student B

- What do you know about Nissan?
- How useful might this paint be?
- What do you think of cars that are boiling hot inside?
- What do you think of the air conditioning in cars?
- What other innovations do cars need?
- How will the paint create a more sustainable society?
- What's the best car colour?
- What advice do you have for the Nissan researchers?

## Spelling

- the puetearterm inside cars
- less pressure on a car's arbteyt
- a saetcpisil in heat-cooling products
- nsnootniav that empower journeys
- create a cleaner, more tsiubsanael society
- The paint is currently only baalialev
- ndasdatr automotive paint
- sciuognnm energy
- This is alsecepyli important
- air-igonntiocidn
- have a sizeable maticp
- vehicles like naumsalbec

### Answers – Synonym Match

1. h	2. e	3. b	4. j	5. d
6. a	7. f	8. i	9. g	10. c

## Role Play

### Role A – Cars

You think cars are the best things to use "cool paint" on. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the worst of these (and why): houses, drinks cans or baseball caps.

### Role B – Houses

You think houses are the best things to use "cool paint" on. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the worst of these (and why): cars, drinks cans or baseball caps.

### Role C – Drinks Cans

You think drinks cans are the best things to use "cool paint" on. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the worst of these (and why): houses, cars or baseball caps.

### Role D – Baseball Caps

You think baseball caps are the best things to use "cool paint" on. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the worst of these (and why): houses, drinks cans or cars.

## Speaking – "Cool Paint"

Rank these with your partner. Put the best things to use "cool paint" on at the top. Change partners often and share your rankings.

- |             |                 |
|-------------|-----------------|
| • Cars      | • Bus stops     |
| • Airplanes | • Drinks cans   |
| • Roads     | • Buses         |
| • Houses    | • Baseball caps |

### Answers – True False

1	F	2	T	3	T	4	F	5	F	6	F	7	F	8	T
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Answers to Phrase Match and Spelling are in the text.