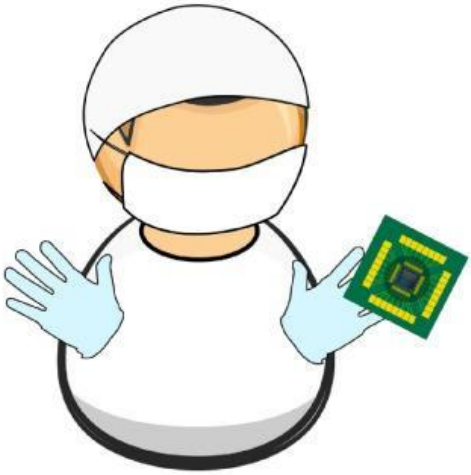
| 1 | IBM Creates New Powerful Computer Chip | N002 |
|---|---|---|



IBM has created a new computer chip that will **improve performance** by 50%. 50 billion **transistors** can be placed on a 2nm chip the size of a fingernail. Up to now IBM, has produced 7nm chips. More transistors, the basic parts of computer chips, lead to better performance.

**In addition**, the new chip uses up to 75% less energy. This will **increase** the battery life of cell phones dramatically. The chip is also expected to **boost** performance in **huge datacentres** that need a lot of power. Faster graphic cards and **speedier object detection** on cameras are other **effects** of the new chip. **Artificial intelligence**, which **relies heavily** on computing power, would profit massively from a new generation of chips.

**Even though** computer experts are excited about the new **development**, it will take a few years before the new chip can be **mass-produced**. This comes at a time when a **shortage** of computer chips has **hit** major **manufacturing** areas, including the automobile industry and smartphone production.

For years IBM has been **concentrating** on chip development and sold its chip production in 2014.

## Words

- **artificial intelligence** = the way computers do intelligent things that people can do, like thinking and making decisions
- **boost** = increase, make better
- **concentrate** = focus on
- **datacentre** = large building with many computers
- **development** = making a new product
- **effects**= results
- **even though**= while
- **heavily** = a lot
- **hit** = affect
- **huge** = very large
- **improve** = to make better
- **increase** = improve, to make better
- **in addition** = also
- **manufacturing** = production
- **mass-produced** = to make something cheaply in large numbers
- **nanometre** = **nm** = one billionth of a metre
- **object detection** = the way you find and identify an object or person
- **performance** = how well something works
- **rely on** = need
- **shortage** = not enough
- **speedier** = faster
- **transistor** = a very small object that controls the flow of electricity

LIVEWORKSHEETS

| 2 | IBM Creates New Powerful Computer Chip | N002 |
|---|---|---|

**Answer the following questions.**

1. By which factor will IBM's new computer chip improve performance? _____

_____

2. How large is the new IBM chip? _____
3. How will the new chip affect the battery life of cell phones? _____

_____

4. Name at least two other areas that will profit from the new chip? _____

_____

5. When can the new chip be produced for commercial use? _____
6. Which manufacturing sectors are suffering from a shortage of computer chips? _____

_____

7. What is IBM concentrating on instead of producing chips? _____

_____

**Match the sentence beginnings with the endings. There are TWO endings you will not need.**

| | |
|---|---|
| 1 | IBM's new chip can |
| 2 | In addition to more power |
| 3 | Graphic cards and detecting objects |
| 4 | Mass production of the new chip |
| 5 | The car industry and smartphone production |
| 6 | The development of computer chips |

| | |
|---|---|
| A | will take a few years to achieve |
| B | is IBM's main area of business |
| C | improve performance by 50% |
| D | are areas where the new chip can be used. |
| E | will start within the next few years |
| F | the chip also uses less energy |
| G | work with fewer transistors |
| H | are suffering from a shortage of computer chips |

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| | | | | | |

LIVEWORKSHEETS

| 3 | IBM Creates New Powerful Computer Chip | N002 |
|---|---|---|

**Complete the text by filling in the missing words from the box on the right. There are THREE words you will not need.**

IBM has created a new computer chip that will **(1)** _____ performance by 50%. 50 billion transistors can be **(2)** _____ on a 2nm chip the size of a fingernail. Up to now IBM, has produced 7nm chips. More **(3)**_____, the basic parts of computer chips, lead to better performance.

In addition, the new chip uses up to 75% less **(4)** _____. This will increase the **(5)**_____life of cell phones dramatically. The chip is also expected to boost **(6)**_____in huge datacentres that need a lot of power. Faster graphic cards and speedier object **(7)**_____on cameras are other effects of the new chip. Artificial intelligence, which **(8)**_____heavily on computing power, would profit massively from a new **(9)**_____of chips.

Even though computer experts are excited about the new **(10)** _____, it will take a few years before the new chip can be mass-produced. This comes at a time when a **(11)** _____of computer chips has hit major manufacturing areas, including the automobile industry and smartphone production.

For years IBM has been **(12)**_____on chip development and sold its chip production in 2014.

**battery**
**concentrating**
**detection**
**development**
**energy**
**improve**
**generation**
**graphic**
**loss**
**performance**
**placed**
**relies**
**shortage**
**size**
**transistors**



LIVEWORKSHEETS

| 4 | IBM Creates New Powerful Computer Chip | N002 |
|---|---|---|

KEY

**Answer the following questions.**

1. 50 percent / half
2. 2 nm / 2 nanometres
3. increase battery life / use less energy
4. datacentres / object detection / artificial intelligence
5. not until a few years / in a few years
6. automobile industry / smartphone production
7. development (of chips)

**Match the sentence beginnings with the endings. There are TWO endings you will not need.**

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| C | F | D | A | H | B |

**Complete the text by filling in the missing words from the box on the right. There are THREE words you will not need.**

IBM has created a new computer chip that will **(1)** **improve** performance by 50%. 50 billion transistors can be **(2)** **placed** on a 2nm chip the size of a fingernail. Up to now IBM, has produced 7nm chips. More **(3)** **transistors**, the basic parts of computer chips, lead to better performance.

In addition, the new chip uses up to 75% less **(4)** **energy**. This will increase the **(5)** **battery** life of cell phones dramatically. The chip is also expected to boost **(6)** **performance** in huge datacentres that need a lot of power. Faster graphic cards and speedier object **(7)** **detection** on cameras are other effects of the new chip. Artificial intelligence, which **(8)** **relies** heavily on computing power, would profit massively from a new **(9)** **generation** of chips.

Even though computer experts are excited about the new **(10)** **development**, it will take a few years before the new chip can be mass-produced. This comes at a time when a **(11)** **shortage** of computer chips has hit major manufacturing areas, including the automobile industry and smartphone production.

For years IBM has been **(12)** **concentrating** on chip development and sold its chip production in 2014.

LIVEWORKSHEETS