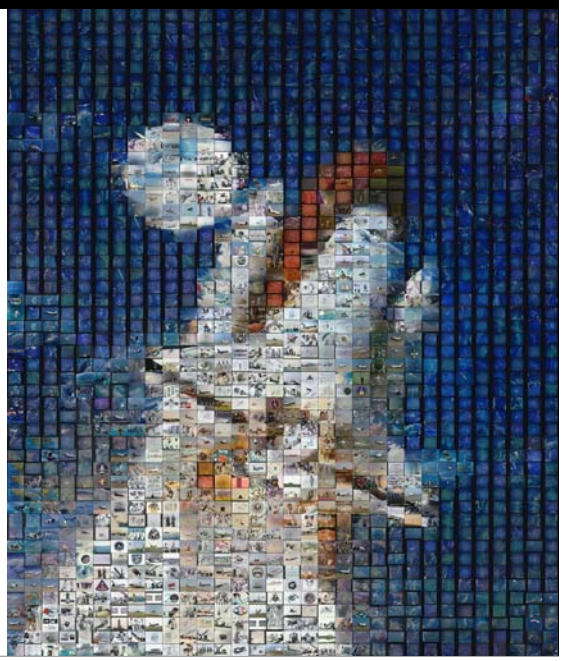
# NASA SPINOFFS



Our exciting topic for today is NASA Spinoffs. Would anyone like to guess what a spinoff is?

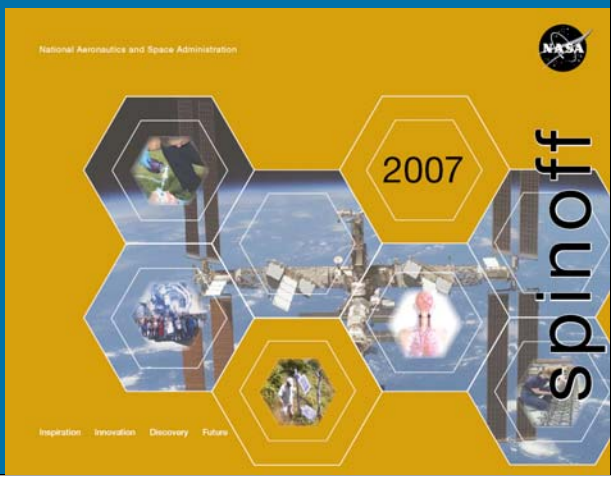
# WHAT IS A SPINOFF?

A. An annual magazine published by NASA.

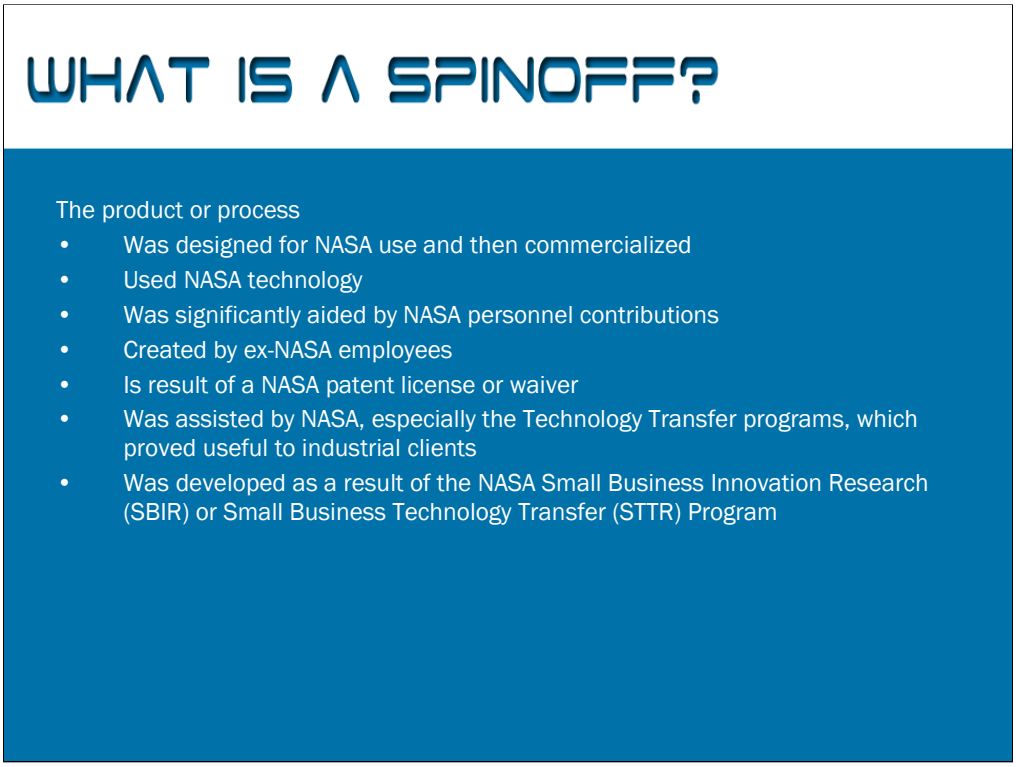
B. A product designed for NASA use and then commercialized, or marketed, and sold to the public.

Both are correct.

Let's learn more!




Spinoff is NASA's annual premiere publication featuring successfully commercialized NASA technology. For more than 40 years, the NASA Commercial Technology Program has facilitated the transfer of NASA technology to the private sectors. The resulting commercialization has contributed to the development of commercial products and services in the fields of health and medicine, industry, consumer goods, computer technology, and environment. Through distribution and outreach activities, NASA technology has benefited global competition and the economy. Since 1976, Spinoff has featured between 40 and 50 of these commercial products annually.




NASA engineers and scientists are creating new and exciting things every day. The are inventing. NASA also supports innovative research and supports small businesses with inventions. Criteria for being featured in Spinoff:

1. A product was designed for NASA use, to NASA specifications, and then commercialized.
2. A component or process involving NASA technology was:
    1. used in manufacturing the product.
    2. integral to the product's existence or commercialization.
    3. a design modification of an existing product.
3. NASA Center laboratory personnel made significant contributions to designers of the product, including the use of NASA facilities for testing purposes.
4. Successful entrepreneurial endeavors by ex-NASA employees whose technical expertise was developed while employed by NASA.
5. A product is commercialized as the result of a NASA patent license or waiver, including patents waived to the inventors.
6. Technology Transfer programs or activities contributed to the product development and commercialization (e.g., Tech Briefs, RTTCs, COSMIC, Applications Projects). Preferably, software examples will involve use of NASA-generated programs, and RTTC examples will permit identification of specific NASA technical information (e.g., reports) or other NASA assistance that was useful to the industrial clients.

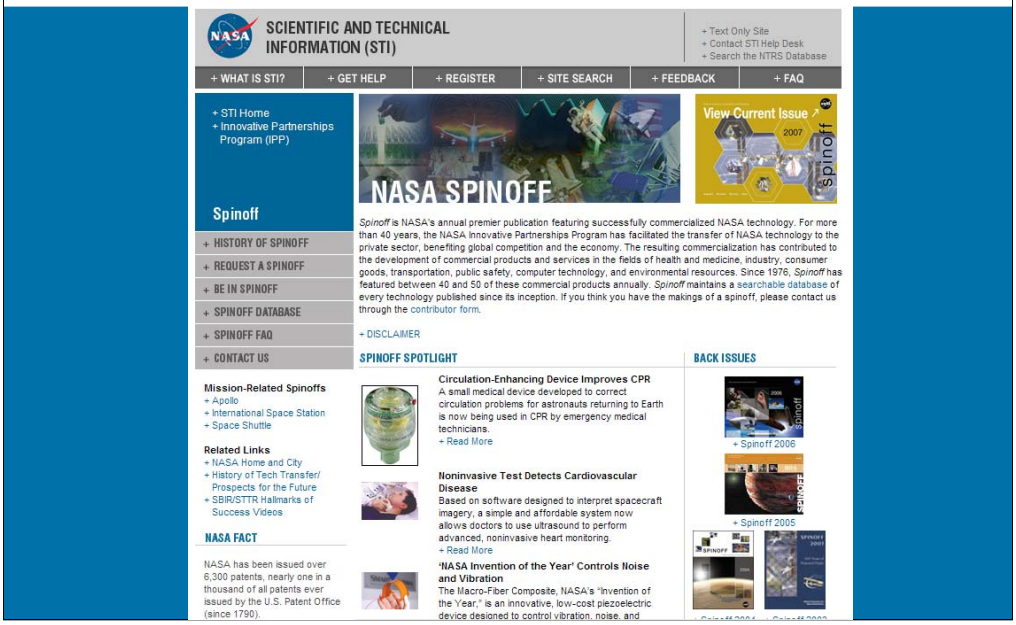

As a result of a 1958 congressional mandate, NASA, in 1962, created the Technology Utilization Program. It was supported by Technology Utilization Offices at each of the field centers and four Industrial Applications Centers (IACs). The number of IACs grew rapidly to seven by the early 1970s and ten in the early 1980s.

Early studies of Tech Briefs, the publication dedicated to informing the scientific community about available NASA technologies, and ongoing requests received for supporting information, indicated a strong need in the private sector for new technology to aid in the development of commercial products and services.

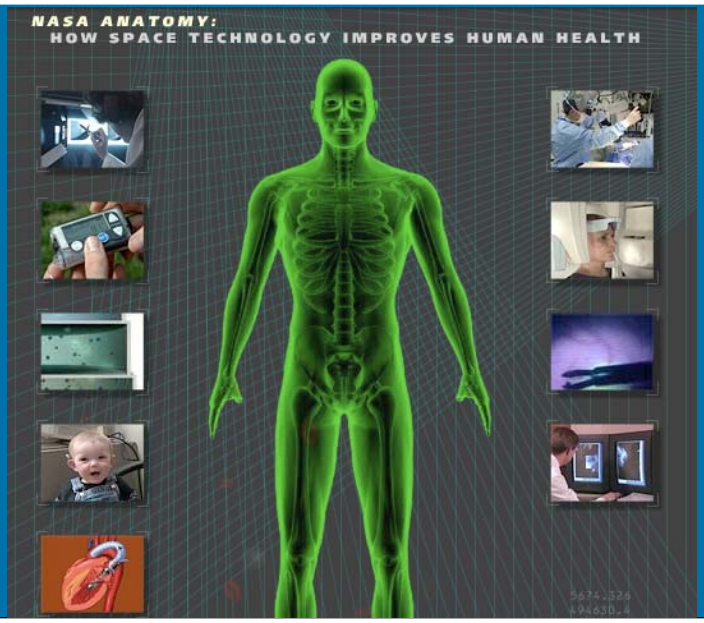
When spinoff products began to emerge from space technologies, NASA considered the possibility of an annual report to present at congressional budget hearings. The result was a black and white “Technology Utilization Program Report,” published in 1973, followed by another one in 1974. The technologies in these reports created interest in the technology transfer concept, its successes, and its use as a public awareness tool. The reports generated such keen interest by the public that NASA decided to make them into an attractive publication. Thus, the first four-color edition of Spinoff was published in 1976.

Each year since, a new issue has highlighted the transfer of NASA technology to the private sector. The Agency distributes copies to politicians, economic decision makers, company CEOs, academics, professionals in technology transfer, the news media, and the general public.

# NASA SPINOFF SITE



# NASA IN YOUR LIFE




Have you ever wondered how space exploration impacts your life? This interactive site will allow you to see many illustrations of inventions that we use in our world every day.

# 10 INVENTIONS

Cordless Tools

Invisible Braces

Ear Thermometer

Scratch-resistant Lenses

Adjustable Smoke Detector

Long-distance Telecommunications

Shoe Insoles

Memory Foam

Water Filters

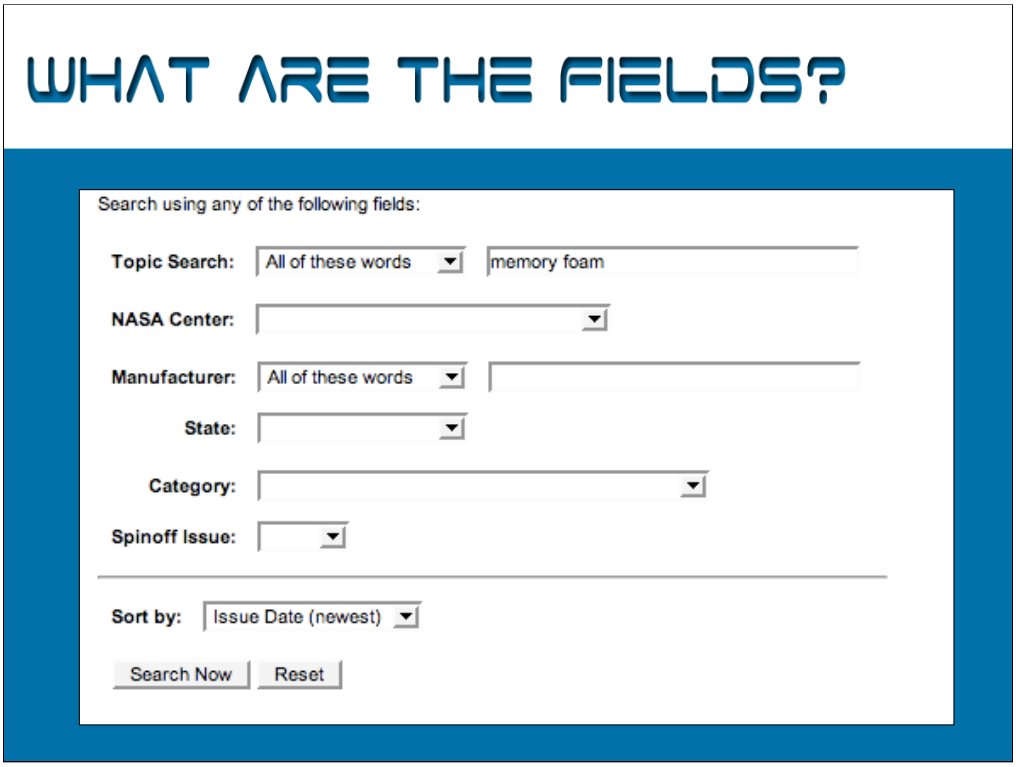
Safety Grooving

# SPINOFF DATABASE

- A database is a storage and organizational system.
- The Spinoff Database is searchable.
- You can narrow your searches by entering values in the different fields.


Many NASA engineers must help to design, create, or use databases every day to look up important information, to reference data, and to keep others informed of the data they collect. The Spinoff Database is actually a very simple database compared to many.

# WHAT ARE THE FIELDS?




Topic search is a key word field

NASA Center is a selectable drop down menu

The manufacturer is who is “commercializing” the product

The state, is obviously the US state

Category is another field that users can select from a drop-down menu

Spinoff Issue is a year, since the Spinoff magazine is only published once a year

Are there any other fields you wish they would have included (they being the database designers/developers)?

This database contains abstracts of all Spinoff articles published since 1976. Links to the full-text articles in PDF are also provided.

Inclusion in this database does not imply that the products are still commercially available. To check the availability of a product, contact the manufacturer using information provided within each entry. Similarly, inclusion does not imply NASA endorsement or validation of claims made by the companies regarding performance or effectiveness.

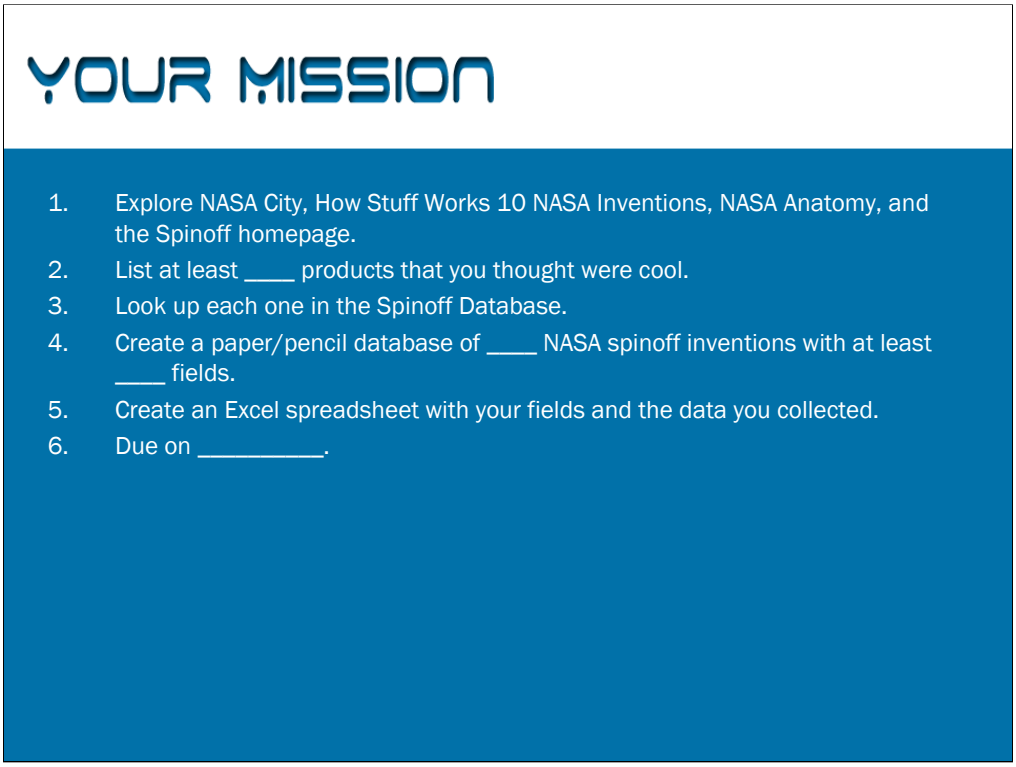

Maybe one day you could be nominated??????

Created by the Space Foundation and NASA in 1988, the Space Technology Hall of Fame recognizes the life-changing technologies emerging from America's space programs; honors the scientists, engineers and innovators responsible; and communicates to the American public the significance of these technologies as a return on investment in its U.S. space program.

In addition to affording innovators much deserved recognition, this program serves to encourage further innovation.

Inducted technologies includes life saving medical devices like the Debakey Blood Pump, the automatic external defibrillator, non-invasive breast biopsy technology, MRI and CAT scan imaging, anti-shock garments, and remote medical monitoring devices. Satellite technologies that power telecommunication include cellular phones, terrestrial networks, and commercially satellite broadcast television and radio communications. Health improvement technologies include LASIK eye surgery, implantable pacemakers and hearing aids, and many other devices that improve the daily quality of life for millions.

There are many technologies deserving of recognition, and we invite you to submit your nominations for induction into the Space Technology Hall of Fame.




Your Mission:

Explore NASA City, How Stuff Works 10 NASA Inventions, NASA Anatomy, and the Spinoff homepage.

List at least ____ products that you thought were cool.

Look up each one in the Spinoff Database.

Create a paper/pencil database of ____ NASA spinoff inventions with at least ____fields.

Create an Excel spreadsheet with your fields and the data you collected.

Any questions?