



Year 3



Term 6 Week 4 – 22nd June– 26th June

This week's topic: Inventors & Inventions

Dear Parents & Carers,

We hope you had a lovely half term and enjoyed the Environmental Changes topic. We have really enjoyed receiving photos of your fantastic work. This week our topic is **Inventors and Inventions**. The majority of the resources needed can be accessed online or in the home so please do not feel you have to get anything additional. We hope you have fun and find inspiration in the activities below.

The structure will be similar to previous weeks and will include activities where you can work with an adult or work independently. You might find that some of the suggested activities are great, and others not so helpful. We suggest you find the right mix for your child.

Sumdog contains daily maths and SPAG learning so please continue to use the Sumdog account and follow the White Rose scheme of work. If you have any issues with your Sumdog log-ins, please contact the school office@dalmain.lewisham.sch.uk and we can easily provide these for you. We have included a wide range of options so please encourage your child to be independent and try to let them choose some of the activities they complete. As a guideline, we suggest no more than 45 minutes of maths and English each day and please take lots of brain breaks. Reading would be an additional activity. These are only suggested times.

As a parent, you know what is best for your child. Wellbeing Wednesday's activities will be emailed to parents and carers through Parentmail. We hope that these activities may give you ideas to stay positive during this challenging time. If you would like to share any of your fantastic work with us, then please do forward them to the school email address which is admin@dalmain.lewisham.sch.uk - (mark your email 'FAO Miss Sousa/ Mr Gwinnett) we would love to see the work you have produced. Take care and stay safe,



Best wishes,

Miss Sousa and Mr Gwinnett.

In your pack each week we will try to include:

- Open ended project ideas and research topics
- Activities to explore independently or together
- Daily Maths lesson
- Games to play
- Ideas for science experiments
- Art and craft ideas
- Links to other learning resources
- A use for toilet roll tubes...



Day	Tasks	Completed?
Monday	<p>Maths:</p> <p>Week 8 lesson 1- Order Fractions Video link: https://vimeo.com/427992995 Worksheet: https://resources.whiterosemaths.com/wp-content/uploads/2020/05/Lesson-1-Order-fractions-2020.pdf Watch the video clip for Week 8 lesson 1, then please either print and complete the worksheet or write in your exercise book. Answers: https://resources.whiterosemaths.com/wp-content/uploads/2020/05/Lesson-1-Answers-Order-fractions-2020.pdf</p> <p>English:</p>  <p>June 22nd marks Windrush Day. We would like you to do some research on why the Windrush Empire is so important to our country and to find out how the Windrush generation helped to rebuild Great Britain after World War II.</p>  <p>The Windrush Generation</p> <p>Following the losses of World War II, Britain was in dire need of labourers. This prompted a campaign to entice people from the countries of the British Empire and Commonwealth to immigrate to the UK.</p> <p>On June 22, 1948, the ship HMT <i>Empire Windrush</i> landed at Tilbury Docks, just east of London, bringing with it the first immigrants from the Caribbean. The ship's name inspired the term, the Windrush Generation, to denote the large-scale influx of Caribbean immigrants during the years that followed.</p>	

Racism and Prejudice

While the Windrush Generation and their descendants are today honoured for their immense contributions to British society following the trauma of the Second World War, the first Afro-Caribbean immigrants were met with extreme intolerance from large parts of the white population. Having initially been encouraged to settle in the UK and take up employment to relieve the labour market by the authorities, many early immigrants were denied access to private employment and accommodation on account of their skin colour. Black people were also banished from many pubs, clubs, and even churches.

From today's perspective, the arrival of the HMT *Empire Windrush* is considered a major landmark not only for the country's recovery from the turmoil of war, but also for the establishment of modern British multicultural society.

Windrush Day Events

Windrush Day was introduced in 2018, on the 70th anniversary of the landing of the first Caribbean migrants, for the purpose of “encouraging communities across the country to celebrate the contribution of the Windrush Generation and their descendants,” according to the UK government. Backed by government funding, the day features a large variety of activities, including dance performances, exhibitions, and debates.

Useful link - A Newsround Special as two children trace their roots, to discover why their grandparents came to Britain as part of the Windrush generation:

<https://www.bbc.co.uk/newsround/44503109>

Another useful link:

<https://www.bl.uk/windrush/articles/windrush-stories-creative-writing-activities-primary-students>

Here are some ideas to complete after your research. Please pick one to complete:

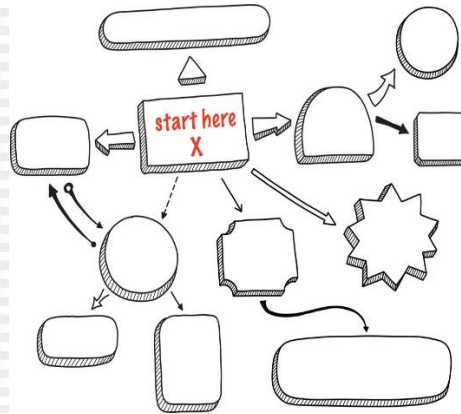
- Write a Windrush poem
- Draw a picture
- Design a commemorative stamp to celebrate Windrush Day
- Make a model of the Windrush
- “I’m celebrating Windrush Day because.....” students can share their reasons either in a short video or with a photo and holding up a sign.

Let's get creative:



It's time to become a great inventor. Pick 10 items from around your house which are recyclable. You will then need to:

1. Look at the items
2. Brainstorm ideas of what you can invent
3. Design (sketch a picture of the invention)
4. Make a model of your invention using the materials you have
5. Name your invention
6. Make a package for your invention (optional)



Tuesday

Maths:

Week 8 lesson 2- Add Fractions

Video link:

<https://vimeo.com/427993095>

Worksheet:

<https://resources.whiterosemaths.com/wp-content/uploads/2020/05/Lesson-2-Add-fractions-2020.pdf>

Watch the video clip for Week 8 lesson 2, then please either print and complete the worksheet or write in your exercise book.

Answers:

<https://resources.whiterosemaths.com/wp-content/uploads/2020/05/Lesson-2-Answers-Add-fractions-2020.pdf>

English:

Take a moment to look all around you. What do you see? How did it get there?

Today we would like you to pick five things in your environment i.e. a light bulb, an airplane, a television. How did these get here? An inventor had to come up with the idea and make the invention.

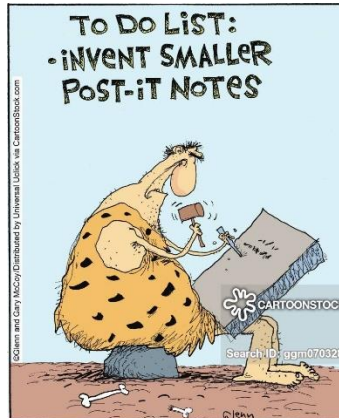


Today we would like you to dig a bit deeper into your invention. Please research the following about the five inventions around you:

1. Name of the invention
2. Who invented the invention
3. What is the invention?

4. How is it used/what is its purpose?
5. How would life be without this invention/why is it so important?
6. A picture of the invention

You can present your findings in any way you want i.e. an information booklet, a poster, a powerpoint.



Let's get creative:

Let's get our inventors hats on today to make our own DIY bowls. You will need the following items:

- Glue (PVA)
 - A balloon
 - Water
 - Paper (this can be any type of paper (coloured, newspaper, tissue paper, confetti))
1. Blow up the balloon to your desired size
 2. Mix glue and water in a bowl
 3. Apply the glue and water mixture to your balloon
 4. Apply first layer of paper and continue till u have four layers.
 5. Leave the balloon for 24hours to dry
 6. Release the air by popping the balloon.
 7. Trim your bowl
 8. Paint your bowl



Wednesday

Remember that it is Wellbeing Wednesday – check the school's website for this week's updates! Look under News & Dates / Coronavirus Updates and you will find loads of resources and activities.

Maths:

Week 8 lesson 3- Subtract Fractions

Video link:

<https://vimeo.com/427993504>

Worksheet:

<https://resources.whiterosemaths.com/wp-content/uploads/2020/05/Lesson-3-Subtract-fractions-2020.pdf>

Watch the video clip for Week 8 lesson 3, then please either print and complete the worksheet or write in your exercise book.

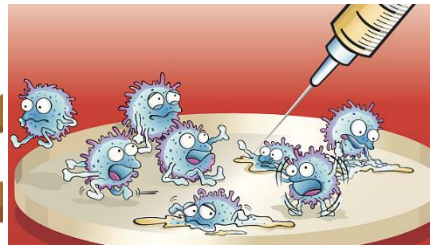
Answers:

<https://resources.whiterosemaths.com/wp-content/uploads/2020/05/Lesson-3-Answers-Subtract-fractions-2020.pdf>

English:

Wellbeing Wednesday

It's well-being Wednesday. Today we would like you to take some time to thank the great inventors of our world and their inventions. Vaccinations, cures and medicine were created by people. At the moment, there are many scientists researching vaccines and developing them to try to find a cure for the Covid-19 virus. It would be lovely if you could write a poem or letter to show them how much we appreciate their hard work and how grateful we are to them.



Let's get creative:

Happy Inventing!



It's time to put those loo rolls to good use today! Today we'd like you to make some wall art using loo rolls. Below are some images to inspire you. You will need:

- Toilet rolls
- Scissor
- Glue
- Paint



Thursday

Maths:

Week 8 lesson 4- Problem solving with fractions

Video link:

<https://vimeo.com/427993581>

Worksheet:

<https://resources.whiterosemaths.com/wp-content/uploads/2020/05/Lesson-4-Problem-solving-with-addition-and-subtraction-of-fractions.pdf>

Watch the video clip for Week 8 lesson 4, then please either print and complete the worksheet or write in your exercise book.

Answers:

<https://resources.whiterosemaths.com/wp-content/uploads/2020/05/Lesson-4-Answers-Problem-solving-with-addition-and-subtraction-of-fractions.pdf>

English:

Today we would like you to research inventors and their inventions. After you have done some research, pick your favourite inventor to write a biography about. A biography is when you write about a person's life.

Writing Prompt: Innovative Inventors

Write an informative paragraph about the inventor you researched. Tell readers about the invention your inventor is most known for creating. Explain how this invention solved a problem for people. How did this invention change people's lives?

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Below is an example to help you of things to include:

Name _____

Thomas Edison



Born: February, 1847,
Milan, Ohio

Died: October 18, 1931

Awards: Congressional Gold Medal, Distinguished Service Medal and more

Children: 6 children

Wife: Mary Stilwell (died) and Mina Miller

Thomas Edison is one of the most famous inventors of all time. He was an inventor and businessman. He was able to manufacture and market his inventions. He is best known for his inventions of the light bulb, phonograph and motion picture camera.

Early Years
Thomas was the last of seven children in his family. He was hard of hearing because he had scarlet fever. Because Thomas was easily distracted and had difficulties in school, his mother (who was a school teacher) decided to teach him at home. He loved to read books on a variety of subjects and this gave him an opportunity to learn things he wouldn't learn in a traditional classroom.

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Let's get creative:



Today you get to make your very own toy car. Get your thinking caps on and let's get creative.

You will need:

- Cardboard
- Bottle tops
- Straws
- Glue
- Scissors

Below are some designs to inspire you. Remember that your invention must be able to move when you push or pull it.

Challenge: Can you use a balloon to make your toy car move?



Friday

Maths:

Week 8 lesson 5- Pick a skill from this week that you have found challenging to practise and do some further work on.

Also spend time completing some addition and subtraction calculations. To make your calculations, simply roll and dice to make a number.

English:

THE GREATEST INVENTION



OF ALL TIME

endlessorigami.blogspot.com

In your opinion,
what is the greatest
invention ever?





Today we would like you to write about what you think the greatest invention is and to explain why. Below is a poster of some inventions to help you but you can pick something different to write about. Think about the following questions to help you with your writing:

- Who is the inventor?
- When was it invented?
- How is the invention used?

- Why is it so important?
- How would life be without this invention?

DREAMLAND'S SCIENCE CHARTS - 1

INVENTORS AND THEIR INVENTIONS-1

SUBMARINE Invented in : 1624 Inventor : Cornelius Drebbel 	CALCULATOR Invented in : 1642 Inventor : Blaise Pascal 	PIANO Invented in : 1709 Inventor : Bartolomeo Cristofori 	THERMOMETER Invented in : 1714 Inventor : Daniel Gabriel Fahrenheit 
ROLLER SKATES Invented in : 1700 Inventor : Jean-Joseph Merlin 	HOT-AIR BALLOON Invented in : 1783, Inventors : Joseph Michel and Jacques Etienne Montgolfier 	RAILWAY LOCOMOTIVE Invented in : 1803 Inventor : Richard Trevithick 	STETHOSCOPE Invented in : 1816 Inventor : Rene Laennec 
BICYCLE Invented in : 1818 Inventor : Baron Karl Von Drais 	COMPUTER Invented in : 1832 Inventor : Charles Babbage 	SEWING MACHINE Invented in : 1846 Inventor : Elias Howe 	GLIDER Invented in : 1853 Inventor : Sir George Cayley 
TYPEWRITER Invented in : 1873 Inventor : Christopher Latham Sholes 	TELEPHONE Invented in : 1876 Inventor : Alexander Graham Bell 	PHONOGRAPH Invented in : 1877 Inventor : Thomas Alva Edison 	LIGHT BULB Invented in : 1879 Inventor : Thomas Alva Edison 
ELECTRIC IRON Invented in : 1882 Inventor : Henry W. Seely 	FOUNTAIN PEN Invented in : 1884 Inventor : Lewis Edson Waterman 	CAR Invented in : 1885 Inventor : Karl Benz 	MOTORBIKE Invented in : 1885 Inventor : Gottlieb Daimler 
KODAK CAMERA Invented in : 1888 Inventor : George Eastman 	DIESEL ENGINE Invented in : 1892 Inventor : Rudolph Diesel 	RADIO Invented in : 1895 Inventor : Guglielmo Marconi 	X-RAYS Invented in : 1895 Inventor : Wilhelm Conrad Roentgen 

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Let's get creative:



Today we would like you to invent a plant pot using a plastic bottle. We'd like you to get creative with your designs and send pictures of your finished inventions to us. We can't wait to see what you invent. Below are some ideas to inspire you.



Additional Activities

Science

Science: Inventions

A mixture of websites to explore and learn from.



What did the Victorians ever do for us...

<https://victorianchildren.org/victorian-inventions/>

Women inventors: some great inventions and fascinating stories; you might want to find out more about some of them...

<https://www.amightygirl.com/blog?p=12223>

Some interesting reading with some science activities based on the invention of the penny post- make your own ink, for example!

<https://www.postalmuseum.org/wp-content/uploads/2017/02/Pop-It-In-The-Post-resource.pdf>

Some young inventors!

<https://www.youtube.com/watch?v=XiuU1mIFeEc>

A website devoted to young inventors and their inventions...

<https://www.littleinventors.org/>

An amazing 'invention'- a Rube Goldberg machine.

<https://www.youtube.com/watch?v=qybUFnY7Y8w>

And some more about Rube Goldberg, with a few ideas for making your own Rube Goldberg machine.

<https://tinkerlab.com/engineering-kids-rube-goldberg-machine/>

Art /
DT

Inventors and inventions

Light in Art:

With the invention of neon lighting in 1910 came a new wave of artistry that began to appear in cities across the world.



It became a form of sculpture in the 1960's during the Pop Art Movement and since then has grown in popularity, sometimes taking up whole galleries as installations!



Design Your own Neon Art!



Using gel pens or neon markers draw your own neon inspired artworks. You could create a neon sign, poster or create your own patterns or doodles.!



Say Cheese!

Photography revolutionised the world of art! Portraits and landscapes could be captured in a moment. As an art form it has been used to capture unusual shapes and shadows in our environment and tell visual stories. Camera phones can be used to explore this wonderful artistic invention. Can you use a camera and take a photograph of something that inspires your arty skills? Here are some ideas!

<https://clickitupanotch.com/photography-for-kids/>

Micro photographs!

Take a picture of a toy, plant or textured surface! What patterns, shapes and shadows can you find?



Tell a visual story!

Use toys, objects and your imagination to tell a story using snapshots or video!



Become an animator!

<https://www.tate.org.uk/kids/make/art-technology/be-animator>

Stained Glass Candle Holder!

Stained glass was invented in 675 AD! Recycle old plastic bottles to make beautiful candle holders or sculptures using felt tips!



<https://www.instructables.com/id/Plastic-Bottle-quotStained-Glassquot-Candlehol/>

Become an Inspiring Inventor: Design and Draw your own Invention!

Lonnie G Johnson

Lonnie G Johnson is an African American engineer who worked for NASA's Jet Propulsion Laboratory. During his time at NASA, Johnson worked on the Galileo mission to Jupiter, the Mars Observer project, and the Cassini mission to Saturn. He earned multiple awards from NASA for his spacecraft control systems. But Johnson is possibly best known for inventing the Super Soaker water gun!

How about inventing a new toy? Draw a design for a toy that you would like to play with. It might be something that hasn't even been invented yet! It might be something that floats, spins, rolls or flies! Follow this link for some ideas for what you could make!

<https://www.youtube.com/watch?v=WdNcJ1s3Qjo>



Dr. Patricia Bath.



https://www.youtube.com/watch?v=gcE_QMTB_NW4

Bath's laser tool has helped restore or improve vision in patients worldwide. In 1981, Bath invented the surgical tool that made her famous: the Laserphaco Probe, which she continued to perfect and later patented in 1988. The tool was used during eye surgery to correct cataracts, an eye condition that clouds vision and can lead to blindness. Cataracts usually affect older people. Bath's laser tool was more precise, less invasive, and less risky than previous devices, and has been used around the world. Draw and design your own device that could be used to help

Leonardo Da Vinci:

Leonardo Da Vinci was a famous Italian inventor, artist, astronomer and scientist. Many of his ideas have become reality many 100's of years after his death. Learn more about his inspiring ideas below:

https://www.youtube.com/watch?v=Y0_htkvCVpE

Build Your own Parachute!

Leonardo Da Vinci designed the first parachute 500 years ago! Follow the link below to build your own!

<https://deceptivelyeducational.blogspot.com/2015/07/diy-parachutes-and-science-behind-how.html>

Draw your own Sound Creature

Artists explore the use of technology more and more as new inventions bring new creative ways of expressing art. Follow this link to explore strange and exciting sounds and see what unusual creatures you can design by taking part in this interactive activity!

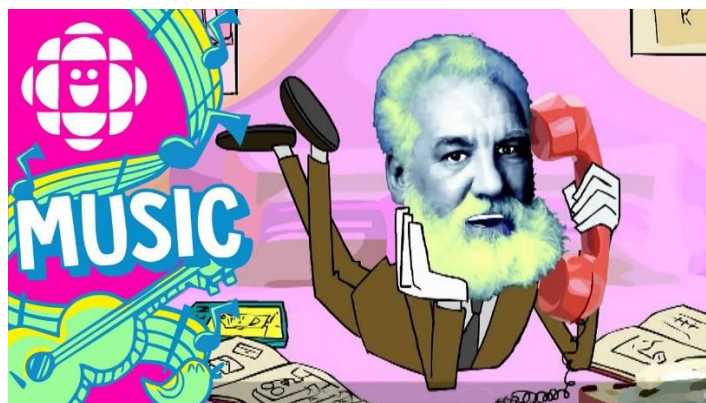
<https://www.tate.org.uk/kids/make/art-technology/draw-sound-creature>



We now have a Dalmain Twitter Art page @dalmain_art for you to share your work with the rest of the school community! We would love to see what you have created to celebrate the gifted artists we have in the school. We will also be sharing ideas and inspirational arts and crafts so don't forget to take a look!

Music

Inventors and Inventions



'Black made that' - <https://www.youtube.com/watch?v=3FCFXht1P0o>

An inspiring rap about Black Inventors.

'Victorian Inventions': <https://www.youtube.com/watch?v=N9g6kWoMHHs>

The Victorians were great at inventing things!

'A short ride in a fast machine' by John Adams

A piece of music that takes its inspiration from the sounds of machines.

Click on this link to hear all about it. Can you keep in time with the woodblock in the piece?

<https://www.bbc.co.uk/programmes/articles/3xwJ8Zpzz44vNJZfqtXbbX/short-ride-in-a-fast-machine-by-john-adams>

'The Typewriter' by Leroy Anderson - <https://www.youtube.com/watch?v=nW8dGwa2zRw>

A piece of music for a typewriter. The invention of the typewriter meant that people could produce pieces of writing much quicker than before as they no longer needed to write by hand.

'Concerto for Turntables' by Gabriel Prokofiev

<https://www.bbc.co.uk/programmes/articles/1SxcJK8NnWbKkVKZQCt95m5/concerto-for-turntables-and-orchestra-5th-movement-by-gabriel-prokofiev> -

The invention of the turntable or record player revolutionised how people could get access to music. People could buy a record and listen to their favourite music in their homes. Listen to this piece of music featuring turntables.

'Theremin and instrument you play by not touching it'

<https://www.youtube.com/watch?v=LYSGTkNtazo>

[In 1919 the Russian Leon Theremin invented this instrument by accident when he was working on a gas meter to measure the density of gas. He found that when his hand was near it he heard a high squeal and when it was further away he heard a lower squeal. Now it is played by musicians as an instrument.](#)

'One moment, one people' - <https://www.singup.org/singupathome/one-moment-one-people>

An inspiring song to learn about working together and making positive connections with each other.



Duke Ellington



29th April 1899 – 24th May 1974

Improvisation is a way to **invent** your own music. Improvisation is where a musician takes a tune or piece of music and makes something up on the spot of his own, using that music as inspiration. This is often done in a style of music known as **'Jazz'**

Duke Ellington was the King of Jazz and Improvisation.

His real name was Edward Kennedy Ellington. He was given the name 'Duke' because of his good manners when he was a little boy. He started playing the piano when he was 7 years old. He was born in Washington DC in the USA.

Duke's grandparents had been slaves and like most African Americans at the time, Duke was a victim of racial prejudice at times.

Duke became a well-known jazz pianist and composer. Jazz is a type of American music that has roots in blues and ragtime. It has lots of improvisation and solos from different instruments.

Duke's jazz orchestra (or Big Band) 'The Washingtonians', played at the famous Cotton Club in Harlem. **At the time, African Americans were allowed to perform at the club but not allowed in as customers. They even had to enter via a back door.**

Duke and his big band wrote some of the world's most famous jazz pieces, including **'It don't mean a thing'**. Listen to this clip with all the fantastic improvisations from the band members. <https://www.youtube.com/watch?v=qDQpZT3GhDg>. What other music of Duke's can you find?

In an era of racism, Duke was proud of who he was, and this is reflected in compositions, such as 'Black and Tan Fantasy', 'Black, Brown and Beige' and 'Creole Rhapsody'. He said: "My men and my race are the inspiration of my work. I try to catch the character and mood and feeling of my people."

Bach 2-part inventions <https://www.youtube.com/watch?v=jEVQ7yHgaSM>

Johann Sebastian Bach was born in 1685 and died in 1750.

His Inventions were short piano pieces.

The Inventions start with a main melody or tune played in the right hand and then a second melody is introduced in the left hand.

The second tune is sometimes similar to the main melody and sometimes it is not, but the two melodies weave together beautifully.

P.E.

Lower KS2- Environmental Changes <https://vimeo.com/423600763>

Extra Fun

- Let's see if you can be a winner!
<https://www.bbc.co.uk/cbbc/joinin/hetty-feather-victorian-inventions>

- Scientists and discoveries
<https://www.bbc.co.uk/bitesize/topics/zw44jxs/resources/1>

- Do you want to be an inventor?
<https://www.bbc.co.uk/newsround/47752534>

- To make a word a better place, I have invented this machine.
Can you describe what the purpose of it is and how it works?



Astuko Tanaka's painting

Henry Ford Word Search

A S S E M B L Y N A P M O C M
U P M X Y X H Y N S O V A Z C
T R P L D M E P O V U X V N M
O I P R O T N E V N I I N A R
M N H D E A R B O R N T N B K
O W E L N N Y T O A S U P E Q
B L K T A F T T G Z F O R D G
I X R F L Y C I U A F P O B P
L M S G P A H Z C X D Z D T M
E V R S R C W T T E S S U A Z
L K M T I W U W H N S P C R O
Z C I M A R O E R I Y H T Q K
S U C C E S S F U L I Y I N B
W R V I K S Q E M N W K O P I
Y T G F F Q R E E N I G N E K

AIRPLANE
APPRENTICESHIP
ASSEMBLY
AUTOMOBILE
COMPANY
DEARBORN
ENGINEER
FORD
GENIUS
HENRY
INVENTOR
LINE
MACHINE
MANUFACTURE
MICHIGAN
MODEL
PRODUCTION
SUCCESSFUL
TRACTOR
TRUCK