EXAMPLES OF DOCUMENTS

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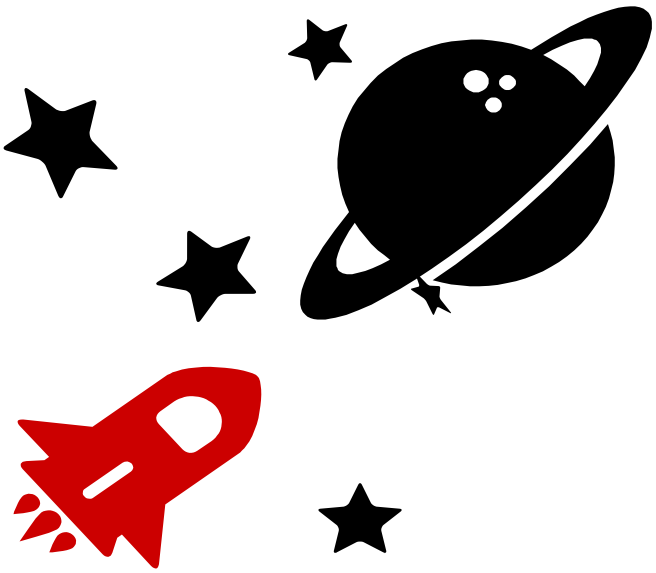

SCIENTIFIC WRITING

Hindawi
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Editorial

Plant Genetics and Gene Study

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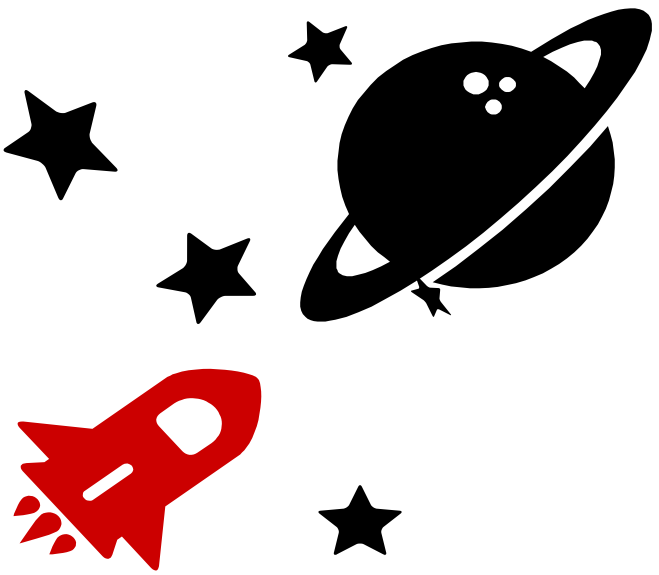
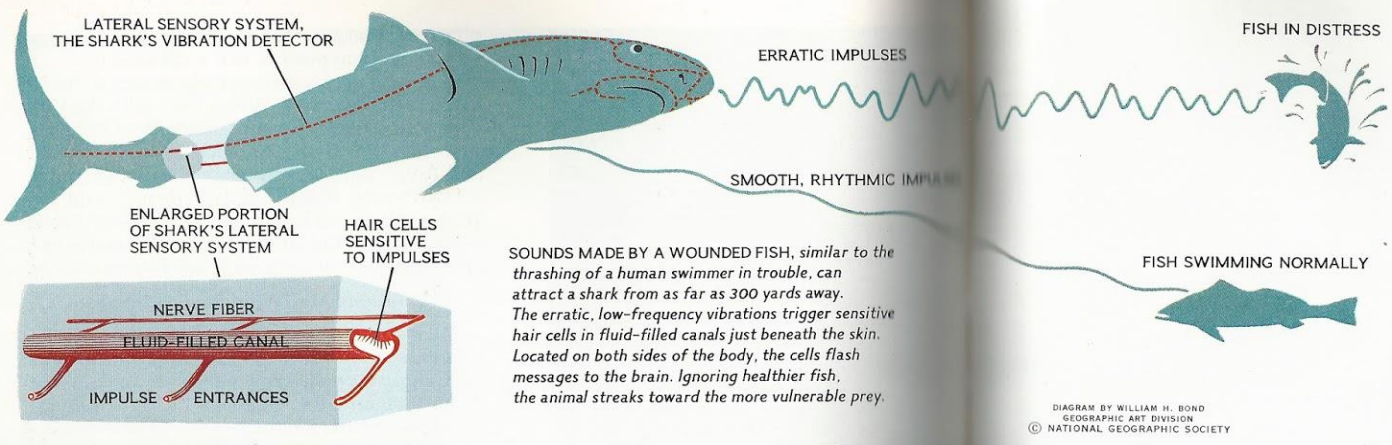
Plants are the primary source of human food and animal feed and also form the basis of numerous industrial and pharmaceutical products. This special issue reflects the diversity of modern research in the field of plant molecular genetics. It covers a wide range of modern technologies and scientific approaches that aim to achieve a better understanding of the various aspects of molecular mechanisms underpinning the key traits in major crops and other commercially important plant species.

Three papers in this issue deal with the development, study, and application of molecular markers in plant breeding. N. Kim et al. in "Development of Clustered Resistance Gene Analogs-Based Markers of Resistance to *Phytophthora capsici* in Chili Pepper" reported on 11 novel molecular markers targeting resistance to the soil-borne pathogen *Phytophthora capsici* in chili pepper. The markers developed through high-resolution melting analysis, represent an excellent tool for marker-assisted selection. Another type of molecular markers, SSR, was used for the study of genetic diversity in cultivated and wild melon (J. Hu et al. "Microsatellite Markers Reveal Genetic Diversity and Relationships within a Melon Collection Mainly Comprising Asian Cultivated and Wild Germplasms"). The authors found enormous genetic variability within the collection, and deployment of the well-known SSR markers enabled the generation of a phylogenetic tree showing the relationships between melon accessions. An investigation presented by R. Ben Ayed and A. Rebai ("Tunisian Table Olive Oil Traceability and Quality Using SNP Genotyping and Bioinformatics Tools") revealed a significant link between the five SNP markers analysed and the biochemical composition and quality of olive fruits.

Several of the presented reports are related to the genetic control of plant response to abiotic stresses. Drought is one of the major challenges being faced in agriculture. The paper presented by N. M. Kamal et al. ("Stay-Green QTLs Response in Adaptation to Post-Flowering Drought Depends on the Drought Severity") provides important findings on QTLs identified in sorghum grown in Sudan (Africa) under drought conditions. The presented data, generated in cooperation with the International Atomic Energy Agency (IAEA), Austria, can be used for the improvement of grain yield in drought-prone environments using a "stay-green" approach through the application of QTL analysis. Tolerance to aluminum toxicity represents an entirely different type of abiotic stress, but this too is an important agricultural problem, especially in acidic soils. The paper "Aluminum Responsive Genes in Flax (*Linum usitatissimum* L.)" presented by G. S. Krasnov et al. reported valuable results from RNAseq analysis and candidate gene identification for flax genotypes tolerant or sensitive to a high concentration of Al. The authors' conclusions on glutathione metabolism, oxidoreductase, and transmembrane transporters can be further applied both in academic study and in practical breeding. Very few investigations have been conducted on plant growth in the absence of gravity during space-shuttle orbit around our planet. The paper presented by O. Yu. Yurkevich et al. ("Molecular Cytogenetics of *Pisum sativum* L. Grown under Spaceflight-Related Stress") describes a chromosome analysis of pea progenies derived from plants grown in space using a novel FISH approach. Minor chromosome rearrangements were observed in response to "spaceflight-related stress," which could lead to better guidelines for



SCIENCE WRITING



SOUNDS MADE BY A WOUNDED FISH, *similar to the thrashing of a human swimmer in trouble, can attract a shark from as far as 300 yards away. The erratic, low-frequency vibrations trigger sensitive hair cells in fluid-filled canals just beneath the skin. Located on both sides of the body, the cells flash messages to the brain. Ignoring healthier fish, the animal streaks toward the more vulnerable prey.*

DIAGRAM BY WILLIAM H. BOND
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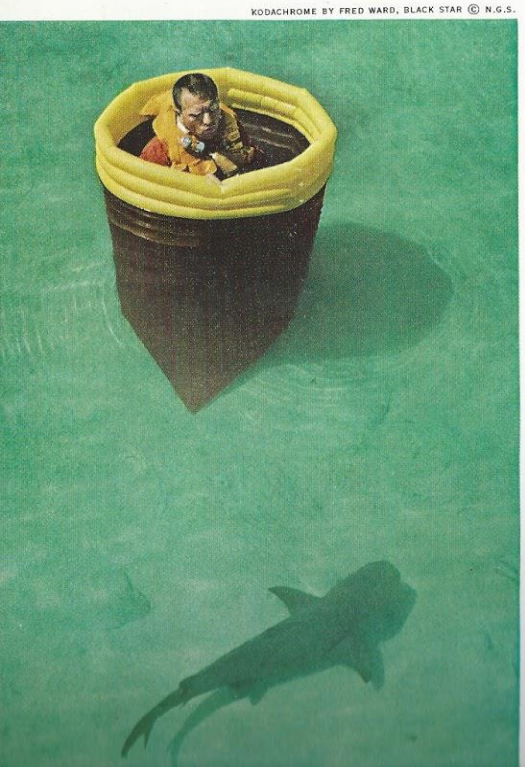
KODACHROME BY FRED WARD, BLACK STAR © N.G.S.



cease whatever they happened to be doing to home on the sound.

"They came in several instances from 300 yards. Had we continued the tests, I believe we would have found they heard the sound from far greater distances."

How else does a wounded fish tempt shark appetites?

"It bleeds," said Stewart Springer. "A small amount of blood attracts sharks from afar, especially from down-current. They have extraordinarily sensitive noses."

Following blood trail or sound, the shark approaches to within sight distance of a possible meal. It circles cautiously, gradually narrowing the circles. Eventually, if still alone, it bumps the object with its snout. A bite comes next, delivered with a savage shaking of the head. The rest is mayhem.

This is the normal feeding pattern of a lone shark. If other sharks appear, all may short-circuit the pattern, attacking in a competitive rush without the preliminaries. As feeding continues and the blood and flapping stimuli increase, the sharks become wildly excited and snap at anything they encounter, including other sharks.

One species of shark is a cannibal even before it is born. The eggs of the sand tiger hatch within the uterus, where the young remain until they are sufficiently developed to enter the ocean. The first baby hatched feeds the hard way: As he was examining a pregnant shark, an unborn baby bit his hand!

Violent habits might not make sharks welcome at a swimming party, but the creatures do have their uses. Generations of premedical students of comparative anatomy, for example, have studied spiny dogfishes, small sharks that are cheap and readily obtainable.

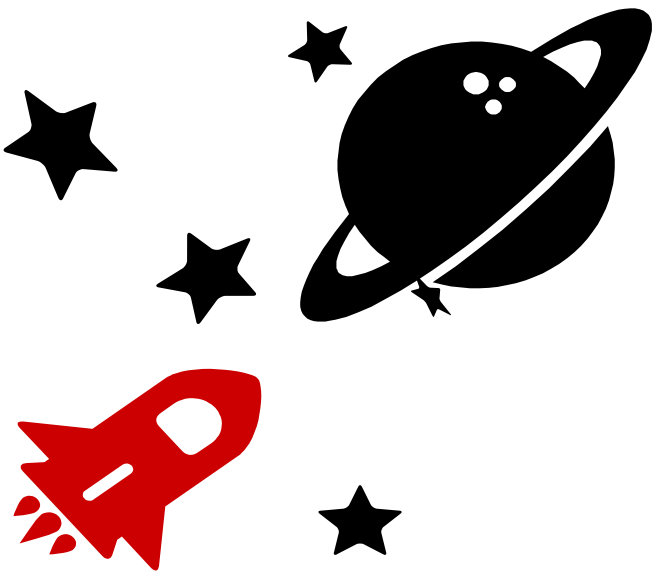
Being boneless, dogfishes and other sharks are easy to dissect. Not as complex as mammals, they provide simple diagrams of features and processes common to many life forms.

Sharks Have Cancer Shield

Scientists now believe sharks to be resistant to cancer and less prone than human beings to heart diseases and other major ailments. At the University of Miami School of Medicine, Drs. L. William Clem and M. Michael Sigel, collaborating with Dr. Parker A. Small of the National Institutes of Health, discovered that sharks possess only one class of serum antibodies.

These are like the ones a human infant produces to protect itself against disease, and which adult humans make in comparable quantity only when afflicted with certain blood cancers. It could be of importance to learn how sharks synthesize such high levels of these proteins.

Through studies of shark blood, livers, and brains, Drs. David P. Rall and Richard H.



CREATIVE WRITING

When the rainy season comes, Niño Carlitos spends weeks building a very tiny pyramid. The Doctorita frowns at the pyramid pieces stacked on the table. "I can't believe you're playing with toys while I run our household and feed our family."

"It's not a toy," he says, looking hurt. "It's a perfectly proportioned replica of the Great Pyramid of Giza in Egypt. The only one of the Seven Wonders of the Ancient World still in existence."

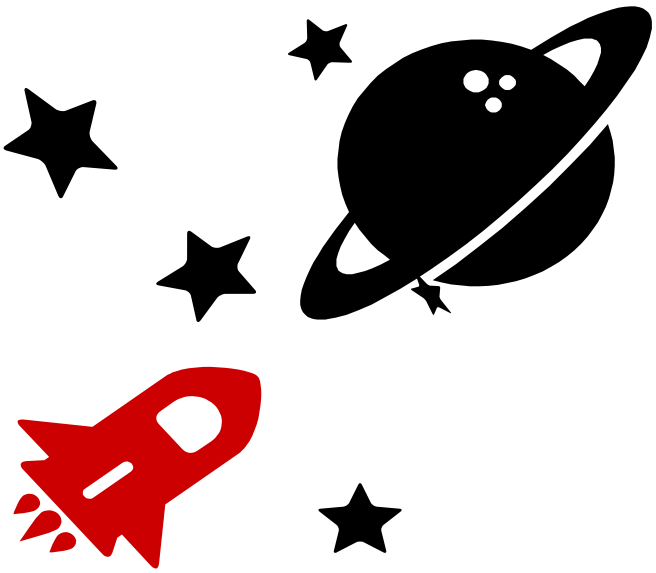
But the Doctorita's words must shame him because he decides to use his spare time making extra cash. One day he comes up with the idea of creating wooden puzzles to sell at school. So the whole family starts spending afternoons in Niño Carlitos's workshop. Jaimito sits on the ground playing with piles of sawdust while we work. My job is to sand the puzzle pieces with scratchy paper.

"Good work, *m'hija*," Niño Carlitos says. "Very smooth edges."

Meanwhile, the Doctorita glues pictures of Bugs Bunny and Mickey Mouse onto the wood. Every once in a while, she rolls her eyes and mutters, "Here I am, a trained dentist and a teacher, gluing puzzles."

"But you're so good at it, Negra," Niño Carlitos says as he dumps a new batch of puzzle pieces on the table. "So precise."

After three or four months, Niño Carlitos grows bored with making puzzles and starts building a wooden airplane that will be big enough for Jaimito to ride around in. I perch beside Niño Carlitos on a bench, watching him work, bouncing with anticipation. A new toy for Jaimito means a new toy for me. Once it's finished and painted red and white, I ride around in it too.



CONTENT WRITING

WHY IS ARCH REAL ESTATE THE NUMBER 1 RESIDENTIAL REAL ESTATE FRANCHISE?

Arch Real Estate is the world's largest real estate franchise with more than 1100 offices and 210,000 associates. The franchise is also number one in units and sales volume in the United States.

In 2018, Arch Real Estate began its transformation into a technology company, developing the real estate platform that agents' buyers and sellers prefer. Since 1983, the company has cultivated an agent-centric, technology-driven and education-based culture that rewards its agents as stakeholders.

ARCH REAL ESTATE
Residential Real Estate

1901 Everest Avenue
Atlanta, GA
1-800-505-5000

Outside

WHY BUY WITH ARCH REAL ESTATE?

We love helping buyers find their dream home! That's why we work with each client individually, taking the time to understand their unique lifestyles, needs and wishes.

WHEN YOU WORK WITH US, YOU GET:

- An informed and expert real estate agent
- A committed friend to negotiate on your behalf and best interests
- The framework in place to streamline buying your home
- The backing of a trusted company, Tren Real Estate

Careers Worth Having

Having studied the platforms used by thousands of the most successful agents in the industry, we've created the model for what it takes to perform in real estate. We reinforce these high-performers through training, coaching, educational events and a best-selling series of career guides.

Businesses Worth Having

Real estate is a local business driven by individual associates and their presence within their communities. This belief comes from our deep conviction that the agent, not the company, is the brand that matters most. Our primary role is to help agents grow their own businesses. That's why we stand behind our agents, not in front of them.

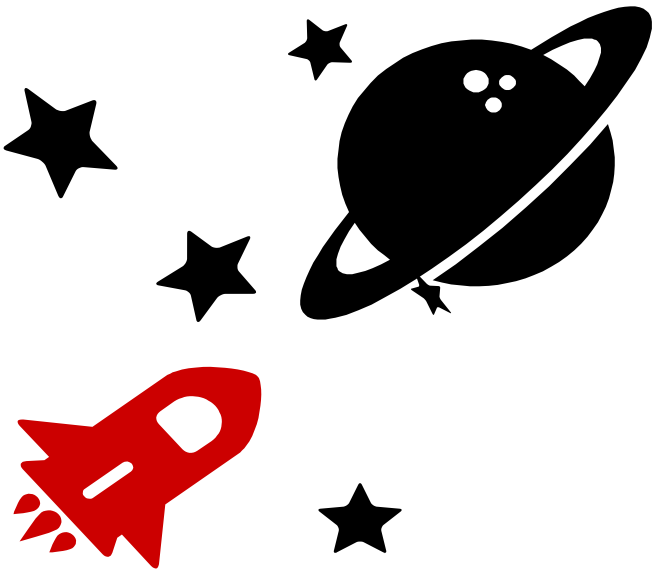
Lives Worth Living

Wealth only matters when it can fund a great life with deeper meaning. Keller Williams is defined by a culture of agents who care deeply about each other and are committed to having a positive impact on their clients and their communities.

HOW WE WILL HELP YOU WITH YOUR HOME SEARCH:

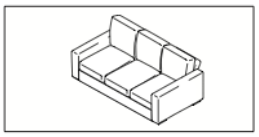
- Previewing homes in advance on your behalf and convenience
- Personally touring homes and neighborhoods with you
- Keeping you informed of new homes on the market
- Helping you preview homes on the Web
- Advising you of other homes that have sold and for how much
- Working with you until we find the home of your dreams

Inside



TECHNICAL WRITING

nabru Assembly Instructions Standard 3 Seat Sofas – Split Facias

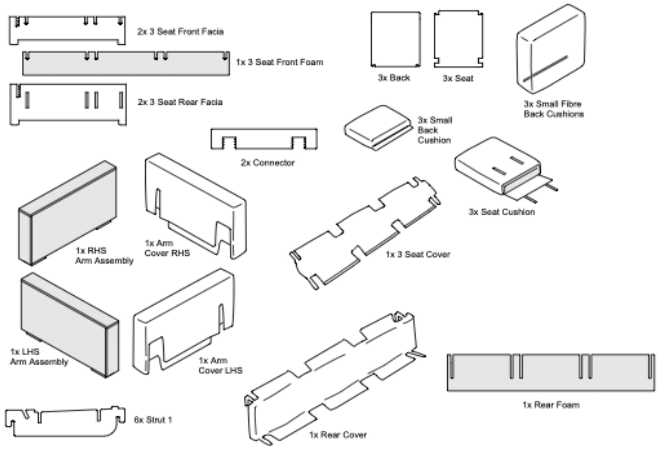


Attention: If you have a floor that could be easily scratched or damaged please ensure you cover the arm feet with protective felt first.

Attention: Please ensure you have all parts before commencing assembly. Please read all of the instructions before commencing.

Attention: If you have purchased optional accessories. Please refer to the **Optional Accessories** assembly instructions which are supplied separately.

1. Identifying the Parts

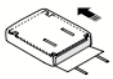


2. Assembly of the Seats and Backs

2.1 Locate a **Back** and a **Back Cushion**.

2.2 Slide the **Back** into the **Back Cushion** as shown.

2.3 Repeat with the other **Backs** and **Back Cushions**.

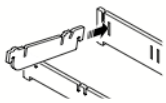


2.4 Locate a **Seat** and a **Seat Cushion**.

2.5 Repeat with the other **Seats** and **Seat Cushions**.

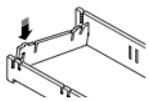
2.6 Tie the straps.

3. Assembling the Frame

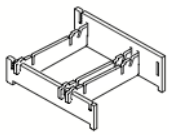


3.1 Locate a **3 Seat Left Front Fascia**, a **3 Seat Lest Rear Fascia** and three **Strut 1s**.

3.2 Insert **Strut 1** into the slot at an angle as shown.

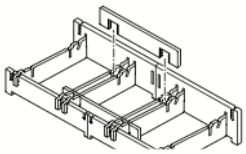


3.3 Press the front of **Strut 1** down firmly into the slot as shown.



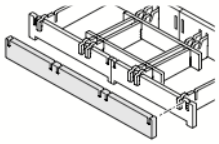
3.4 Repeat with the other **Strut 1s** as shown.

3.5 Locate the **3 Seat Right Front Fascia**, **3 Seat Right Rear Fascia** and three **Strut 1s**. Assemble as in steps 3.2 to 3.4 see step 3.6.



3.6 Arrange the assembled **Left** and **Right Frames** as shown.

3.7 Locate the two **Connectors**. Pressing down firmly join the **Assembled Left** and **Right Frames** as shown.

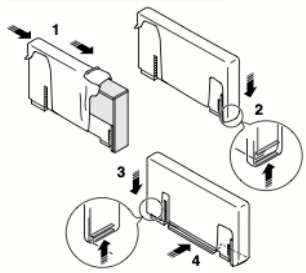


3.5 Locate a **3 Seat Front Foam.**

3.6 Remove the protective layer from the double-sided tape.

3.7 Lay the **3 Seat Front Foam** tape side down on the front of the **Frame Assembly** as shown.

4. Fitting the Arm Cover



4.1 Locate the **RHS Arm Assembly** and the **Arm Cover RHS**.

4.2 If your sofa has steel feet remove the protective covers before fitting the cover.

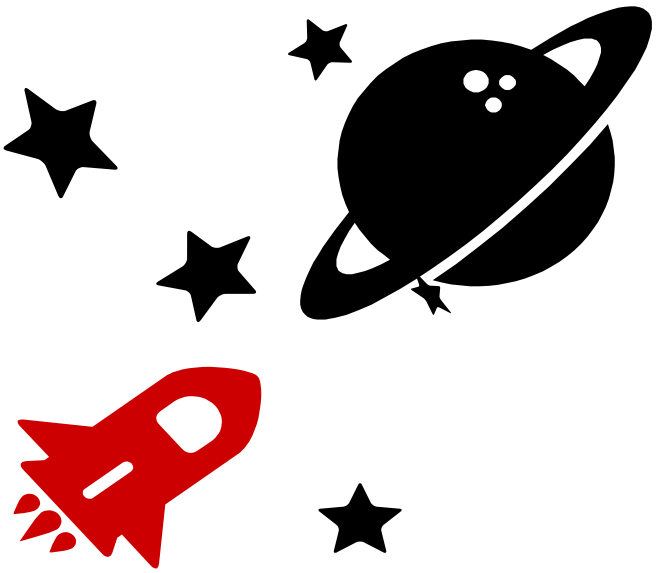
4.3 Slide the **Arm Cover RHS** onto the **RHS Arm Assembly** from the rear as shown. Ensure the rear is located correctly

4.4 Pull the cover towards the front of the **RHS Arm Assembly**. Pull down firmly and locate the velcro strip onto the underside of the **RHS Arm Assembly** as shown.

4.5 Pull the rear of the cover down and locate the velcro strip onto the underside of the **RHS Arm Assembly** as shown.

4.6 Pull the flap in the middle of the opposite side underneath the **RHS Arm Assembly**. Attach it to the velcro strip as shown.

4.7 Repeat using the **LHS Arm Assembly** and the **Arm Cover LHS**.



BUSINESS WRITING

Product Launch Update for the GHY Computer

Date: Dec. 17, 2020

To: All Employees

From: Jason Saxon, Vice President of Marketing

Subject: Product Launch Update for the GHY Computer

Considering the responses we've received over the past three months from product testers and customer surveys, I am writing to inform you that the product launch for the GHY Computer will be delayed from its initial date of Jan. 2, 2021, to April 2, 2021.

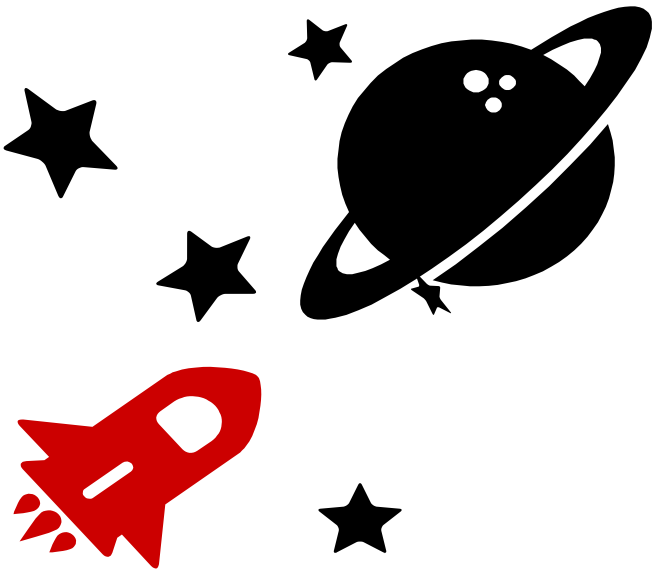
We believe that the extra time to test the computer's capability with updated software programs will serve to help the customer in expanding their usage of software to perform daily tasks. Some employees have expressed a belief that this delay will lead to an increase in competitors' sales, so the organization has decided to sell our current computers at a 30% discounted rate up until the computer's launch while offering holiday sales of 50% up through the new year. Sales representatives can share this information with current customers and leads.

The marketing department will keep the organization posted on new updates. We understand that this change may affect the revenue and profits generated by the sales team. Managers have the authorization to drop the current sales targets for Q4 and work with representatives on retaining current customers to provide customer service when needed.

While this delay is unfortunate news for all of us, we believe in the promise of our employees to rebound from this and thrive during the 2021 fiscal year. We believe our current clients will stay committed to us despite this news.

Thank you,

Jason Saxon
jsaxon@ghycomputers.com
458-983-6470



THAT'S ALL, FOLKS!