

SCIENCE WITHOUT BORDERS®

Challenge



REEF SUPERSPECIES

Contest Rules

ABOUT

The *Science without Borders® Challenge* is a contest to get students and teachers more involved and interested in ocean conservation through art. This annual contest inspires students to be creative while promoting public awareness of the need to preserve, protect, and restore the world's oceans and aquatic resources, contributing to the overarching goals of the Khaled bin Sultan Living Oceans Foundation.

The Foundation is a US based, non-profit environmental science organization. The Foundation was established to protect and restore the world's oceans through scientific research, outreach, and education.

The founder, His Royal Highness Prince Khaled bin Sultan of the Kingdom of Saudi Arabia, understands the challenges of conserving Earth's coral reefs across oceans and political boundaries, and recognizes that collaboration is vital to ocean conservation. Inspired by the working approach of *Medecins Sans Frontiers*, Prince Khaled proposed that *Science Without Borders®* be the motto and the philosophy of the Foundation.

ELIGIBILITY

This international art competition is open to all students 11-19 years old. Students must be enrolled in primary or secondary school, or the home school equivalent. College and university students are not eligible for this contest.

Work will be judged in two categories, with 1st, 2nd, and 3rd place prizes awarded for each:

- 11 – 14 year-olds
- 15 – 19 year-olds

PRIZES

Winners of the *Science Without Borders® Challenge* will be publicly announced. Prizes awarded to contestant winners are as follows:

- 1st Place: \$500
- 2nd Place: \$350
- 3rd Place: \$200



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THEME

The theme for this year's *Science without Borders® Challenge* is 'Reef Superspecies.'

Throughout the world, coral reefs are rapidly declining due to anthropogenic (human-induced) and natural threats. Even threats that were once considered natural are now intensified by human disturbances. Coral reefs face many threats including ocean acidification, bleaching, overfishing, pollution, and so much more. Organisms that are a part of the coral reef ecosystem are negatively affected by these threats.

In order for these reef organisms to survive the prolonged threats that they face, they may need to adapt to changes in their environment. **Adaptation** is a heritable trait or characteristic that helps an organism to survive in its environment. There are three types of adaptations 1) **anatomical**: a change to a body part, 2) **physiological**: the body performs a certain function, or 3) **behavioral**: affects the way an animal acts. Let's take a look at each type of adaptation using an elephant as our example.

Physiological: Elephants live in hot environments. Sweat helps to cool organisms down; however, elephants do not have sweat glands. Instead, they have large ears that they flap back and forth. The hot blood rushes to the elephant's ears and the heat is released. This cools the blood in their ear capillaries down. The blood from their capillaries then returns to the rest of the elephant's body, helping them keep a constant body temperature. Keeping a constant body temperature is a *physiological adaptation*.

Behavioral: Female elephants are organized into groups. They consist of one or more adult females and their calves. The primary function of the elephant family is to protect and raise the calves. By working as a group, the adults increase their calves' chance of survival. Cooperating as a group to care for offspring is a type of *behavioral adaptation*.

For this year's *Challenge*, use your imagination to create a piece of art that illustrates a made-up *Reef SuperSpecies*. A *Reef SuperSpecies* is an organism (plant or animal) that has found a way to adapt to a deadly threat facing coral reef ecosystems. You can make up an organism or base your organism off of an already existing reef organism.

In your artwork, make sure to illustrate your organism (*Reef SuperSpecies*), the threat posed to the coral reef, and your organism's adaptation(s). You may include one or more adaptations, but please only choose one organism. The adaptation(s) can be anatomical, physiological, or behavioral. Please do not write the adaptation(s) on your artwork. There is a place for this information on the *Entry Forms*. When filling out your *Entry Forms* (page 7), make sure that you do the following:

1. Give your *Reef SuperSpecies* a superhero name that helps to identify its adapted superpower.
2. Identify the threat(s) posed to coral reefs that your organism has adapted to.
3. For each adaptation, identify the type of adaptation (anatomical, physiological, or behavioral) that you have created for your *Reef SuperSpecies*.
4. Describe the adaption(s) that your reef organism uses to survive the threat posed to the coral reef.



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Anatomical: When we think of an elephant, we often picture a large, tall animal that has a trunk. There are many reasons that the elephant has adapted a trunk. One of these adaptations is for feeding. Elephants are herbivores and they must be able to reach up in the trees to pick leaves. Elephants have adapted a trunk (body part) to help them feed more easily. Altering a body part, such as a trunk, is an *anatomical adaptation*.

HOW TO APPLY

1. All artwork must be an original work by the contestant and shall not infringe on any copyrights or any other rights of any third parties. For instance, drawing a character from a cartoon or movie is not considered an original work.
2. The artwork must be 2D such as a painting or drawing. Acceptable media include: paint, pencil, marker, crayon, ink, and oil pastel. Digitally created artwork, including photographs, are not accepted.
3. You must send your original artwork. Digital copies of artwork are NOT permitted.
4. All submissions must be made by an individual artist. Group submissions are not permitted.
5. Participants may submit only 1 art piece.
6. Write your first and last name and age in pencil on the back of your artwork.
7. Fill out all required information on the *Entry Forms* (pages 5-7).
8. Artwork and art descriptions may be used in publications and distributed to the media.
9. The Khaled bin Sultan Living Oceans Foundation reserves the right to disqualify artwork deemed offensive.
10. If the explanation of artwork or the artwork itself is plagiarized, then it will be disqualified.
11. Entries that do not comply with all of the contest rules will be disqualified.



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SUBMISSION

Contestants must submit an *Entry Forms* with their submission. It is preferred that you submit your forms online at www.lof.org/SWBCChallenge. All fields on the *Entry Forms* must be filled out in order to be considered for awards.

All original artwork should be mailed to:

*Khaled bin Sultan Living Oceans Foundation
Science Without Borders® Challenge
130 Severn Avenue, Suite 100
Annapolis, MD 21403
USA*

The deadline is Monday, April 24, 2017 by 11:59 pm (Eastern Standard Time). All artwork must be received by this date or it will be disqualified.

JUDGING

A panel of artists, educators, and scientists will be formed to judge the *Science Without Borders® Challenge*.

Artwork will be evaluated on the quality of the artwork, originality, and adherence to the theme.

The *Grading Rubric* that the judges will use to evaluate the work can be found on page 14.



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RIGHTS

The applicant agrees that the Khaled bin Sultan Living Oceans Foundation will retain the submitted artwork and the art description, which may use it to promote the *Science Without Borders® Challenge*, coral and ocean conservation, and the work of the Khaled bin Sultan Living Oceans Foundation in all media worldwide in perpetuity.

STEAM

The Khaled bin Sultan Living Oceans Foundation tries to incorporate STEAM education into all of its education programs. **STEAM** stands for **S**cience, **T**echnology, **E**ngineering, **A**rt, and **M**ath. STEAM is a movement to incorporate artistic innovation into the more well-known STEM formula. While many people today see art and science as two very separate worlds, teaching them together is more of a modern occurrence.

When combining art and science, doors are opened for disengaged students. Both disciplines require learning by doing. A creative outlet can be given to the science enthusiast and, at the same time, it can open new doors to those who are artistic.

The *Science without Borders® Challenge* is a perfect example of STEAM. Through art, students can convey important marine conservation themes, while learning science. In turn, by creating artwork for the *Challenge*, these young artists inspire people around the world to conserve the ocean.

FOR TEACHERS

Are you looking for educational materials to extend and reinforce the knowledge that your students will obtain by participating in *the Challenge*? Look no further.

The Khaled bin Sultan Living Oceans Foundation has created a *Coral Reef Ecology Curriculum* to engage and inspire students to learn about coral reefs and to become stewards of this vital ecosystem, while increasing ocean literacy.

Specifically, there will be a unit about coral reef threats, which will be particularly useful. There will be a variety of materials including reading exercises, videos, background information and lesson plans. These education materials can eventually be found at www.lof.org/CoralReefCurriculum/my-dashboard.



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ENTRY FORMS

Please complete all of the fields below to be considered for the contest. The information may be used to contact applicants with the results of the contest. It is preferred that you submit your entry form online at www.lof.org/SWBchallenge. If you cannot complete this form online, then you may handwrite or type (preferred) this information on the form and mail it with your artwork. NOTE: If we cannot read your handwriting, then we will not be able to contact you with the results of the contest.

APPLICANT INFORMATION:

First/Given Name

Last/Family Name

Preferred Name

Email Address (only if older than 12 years of age)

Check one box: ☐ Female **OR** ☐ Male

Age

Current Grade Level

First and Last Name of Parent/Guardian

Primary Phone Number

Parent/Guardian Email Address

TEACHER/SCHOOL INFORMATION:

First and Last Name of Teacher (any teacher that you currently have; art teacher preferred)

Teacher/School Phone Number

Teacher Email Address

School Name (or if homeschooled, write "homeschool")

School Address

City

State/Province

Country

Zip/Post Code



Are you submitting your artwork as an individual or as part of a class?

Check one box: ☐ Individual **OR** ☐ Class

How did you hear about the *Science without Borders® Challenge*?

Check one or more boxes below:

- ☐ Your teacher
- ☐ Your parent or guardian
- ☐ Khaled bin Sultan Living Oceans Foundation Media
- ☐ Facebook ☐ Google + ☐ Newsletter
- ☐ Twitter ☐ Pinterest ☐ Website
- ☐ Other Social Media
- ☐ Facebook ☐ Google +
- ☐ Twitter
- ☐ Other (please specify)
-

FOR STUDENTS UNDER THE AGE OF 13

All participants (USA and international) under the age of 13, must have a parent/guardian fill out the Children's Online Privacy Protection Act (COPPA) Notice Form (page 9). Send this form in with your artwork. If we do not receive this form and you are under the age of 13, you will be disqualified from the *Science without Borders® Challenge*.

DISCLAIMER

The applicant agrees that the Khaled bin Sultan Living Oceans Foundation will retain the submitted artwork and written information below, which may use it to promote the *Science Without Borders® Challenge*, coral and ocean conservation, and the work of the Khaled bin Sultan Living Oceans Foundation in all media worldwide in perpetuity.

Reef SuperSpecies Name

Description of Media Used (Describe the materials you used to create your artwork. Example: pastels, colored pencil, oil paint, markers, crayons, etc.)

Threat Posed to Coral Reef (Example: ocean acidification, pollution, bleaching, etc.)

Adaptation(s) and Type(s) (anatomical, physiological, behavioral)

Description of adaptation(s) and how the artwork relates to the theme, 'Reef SuperSpecies' in 150 words or less.



Children's Online Privacy Protection Act (COPPA) Privacy Notice

Children's Online Privacy Protection Act (COPPA) requires that we gain verifiable consent for your child to participate in the contest. We are asking for your permission to retain your child's information (first and last name, age, grade level and school; teacher first and last name, phone number, and email address; parent/guardian first and last name, primary phone number, and email address) for the purpose of monitoring the program participation, for allowing contest entries and content submissions, for notifying contest winners, and handing out prizes. If you consent, we may use your child's name, grade, and location (city, state (if USA) and/or country) to promote the contest.

Dear Parent/Guardian,

Your child has entered the *Science without Borders® Challenge*, a free, international art contest hosted by the Khaled bin Sultan Living Oceans Foundation. This *Challenge* was created to get students and teachers more involved and interested in ocean conservation through various forms of art.

For the contest, your child has provided information (first and last name, age, grade level and school; teacher first and last name, phone number, and email address; parent/guardian first and last name, primary phone number, and email address) and his/her artwork for the *Science without Borders® Challenge*. Since your child is under the age of 13, the information collected will be kept confidential in compliance with COPPA and other similar state and federal laws.

The Khaled bin Sultan Living Oceans Foundation is the sole owner of all of the information that is collected during the contest.

- The personal information provided by the child is used for monitoring the program participation, for allowing contest entries and content submissions, for notifying contest winners, and handing out prizes.
- Only with parent/guardian consent, the child's name, grade, and location (city, state (if USA) and/or country) may be used to promote the contest. This includes, but is not limited to promotion on social media, websites, etc.
- The operator will not require a child to disclose more information than is reasonably necessary to participate in the contest as a condition of participation.
- No information will be disclosed to third parties; this means that information will not be shared with any businesses and/or added to any mailing lists.
- The parent can review the child's personal information, ask to have it deleted and refuse to allow any further collection or use of the child's information. Parents/guardians should contact the project coordinator, Amy Heemsoth with questions and/or concerns.

Please fill out the attached consent forms.

The contact person for any inquiries regarding the *Science without Borders® Challenge* is:

Amy Heemsoth, Director of Education
Khaled bin Sultan Living Oceans Foundation
130 Severn Avenue, Suite 100
Annapolis, MD 21403 USA
443.221.6844
heemsoth@lof.org

For more information about the contest go to www.lof.org/SWBchallenge.



Children's Online Privacy Protection Act (COPPA) Privacy Notice Form

Khaled bin Sultan Living Oceans Foundation
COPPA Parent/Guardian Consent Form

Please print out this form and mail it with your artwork to *Khaled bin Sultan Living Oceans Foundation, Science without Borders® Challenge, 130 Severn Avenue, Suite 100, Annapolis, MD 21403 USA.*

I, (print parent/guardian name), the parent or legal guardian of (print child's name), have had the opportunity to review the Khaled bin Sultan Living Ocean's Foundation COPPA Privacy Policy. By signing below, I authorize my child to provide personal information for the *Science without Borders® Challenge*.

I understand that in consenting to my child's registration for the *Science without Borders® Challenge*, I am enabling my child to participate in the contest.

By checking the "Yes" box below, my child's name, grade, and location (city, state (if USA) and/or country) may be used to promote the *Science without Borders® Challenge*.

☐ Yes, my child's first and last name, grade, and location (city, state (if USA) and/or country) may be used to promote the contest.

☐ No, my child's first and last name, grade, and location (city, state (if USA) and/or country) may be used to promote the contest.

I also understand that it is important to provide accurate information in this consent form so that the Khaled bin Sultan Living Oceans Foundation may contact me. Parent/Guardian may be contacted regardless of whether their child has won the *Science without Borders® Challenge*. The parent/guardian of the winning entries may be contacted about the delivery of the prize.

Parent/Guardian signature _____ Dated: _____

Parent/Guardian Email Address:

Parent/Guardian Primary Phone Number:



Applicant Checklist

Are you ready to submit your artwork? Here is a checklist to help you to remember all of the steps .

- ☐ If you are printing and sending a hard copy of your entry forms with your artwork:
- I filled out ALL of the items on the entry forms (pages 5-7).

OR

- ☐ If you are filling out your entry form online:
- I sent my electronic copy of my entry forms and I received a confirmation email.

- ☐ If I'm under the age of 13, my parent/guardian has filled out the Children's Online Privacy Protection Act (COPPA) Privacy Notice Form (page 9) so that I can send it with my artwork.

- ☐ My description of how my artwork relates to the contest's theme is thorough, easy to understand, The artwork and description of the artwork is not plagiarized.

- ☐ My first and last names and age are written in pencil on the back of my artwork.

- ☐ My artwork will arrive before Monday, April 24, 2017 at 11:59 pm (Eastern Standard Time).

If you have checked all of the relevant boxes above, then you are ready to submit. Please send original art work entries to:

*Khaled bin Sultan Living Oceans Foundation
Science without Borders® Challenge
130 Severn Avenue, Suite 100
Annapolis, MD 21403
USA*



Q&A

Q: Will I get my art back?

A: No, all submissions are considered property of the Khaled bin Sultan Living Oceans Foundation. Digital copies of finalists' work will be posted on our website.

Q: Does the deadline mean I should have it mailed by then (i.e., postmarked)?

A: No, the deadline is the last day we will accept artwork arriving at our office. If we do not receive artwork by this deadline, it will be disqualified. No extensions will be granted.

Q: Do I really have to write a description?

A: Yes, many previous *Challenge* winners have beaten other finalists simply because they had a better description. The description may be the difference between you getting third or fourth place, or even being considered a finalist at all. For more information about how we score your submission, please see the *Grading Rubric* (page 14).

Q: Can I just copy information for my description from a website that I used for inspiration?

A: No, plagiarism is grounds for disqualification. Plagiarism is the use of someone else's work, either word-for-word or with the ideas in the same order. All descriptions must be in your own words. Additionally, artwork must also be your own idea. For instance, drawing a character from a cartoon or movie is not considered an original work.

Q: I do not live in the USA, do I need to fill out the COPPA form?

A: All entries for students under the age of 13, regardless of location, must complete a COPPA form or they will not be eligible for the contest.

Q: I am a teacher, can I submit work for my students?

A: Yes, we encourage teacher submissions! Be sure each entry has the name of the artist and their age written in pencil on the back of it. If your student(s) are under the age of 13, make sure the COPPA form is completely filled out for each one. The artwork can be shipped in one package.

Q: I'm worried about packaging, what do you suggest?

A: If you are sending the artwork in a flat package, put something rigid in with it, so it does not get bent. This seems to minimize damage, but you may want to make sure the art is protected on both sides with additional packaging. We recommend that you do not fold your artwork. If you can roll your artwork, we suggest putting the artwork in a mailing tube.

Q: How will I know if you received my artwork?

A: We do not send confirmation emails. Please add tracking to your shipment. Tracking will allow you to track the status of your package.

Q: Can I submit a digital copy of my artwork?

A: No, we require the submission of the original artwork. Digital copies of artwork will be disqualified.

Q: What if I don't fill out all of the paperwork?

A: You will be disqualified if we do not have all of the information that we need.



Q: How will I know if I win?

A: We will contact entrants through email when the *Challenge* has been completed. Also, results will be posted on our webpage and social media pages.

- **Facebook:** www.facebook.com/livingoceansfoundation
- **Twitter:** www.twitter.com/LivingOceansFdn
- **Google+:** www.plus.google.com/+LivingoceansfoundationOrg
- **Website:** www.lof.org/SWBchallenge

Q: Why do you need so many email addresses (e.g., parent/guardian, teacher)?

A: We previously had trouble contacting entrants, either because their email address was illegible or incorrectly written. By providing multiple email addresses, we are assured to have a way to contact you.

Q: Can anyone enter the *Science Without Borders® Challenge*?

A: Anyone in any part of the world who is between the ages of 11 and 19 and enrolled in primary or secondary school or the homeschool equivalent may enter. College and university students are not eligible for this contest. If you are 11 or 12 years old, make sure that you submit the COPPA form to be eligible.

Q: I am 10 years old; however, I turn 11 in May. Can I enter the *Challenge*?

A: You may participate in the *Challenge* as long as you turn 11 by Monday, April 25, 2017.

Q: What if you get my artwork mixed up with someone else?

A: Please be sure to write your name, in pencil, on the BACK of your artwork so this does not happen.

Q: Can I make a sculpture, pottery, collage, or digital artwork?

A: No, all submissions must be 2-dimensional, which means that they are flat. 2-dimensional artwork is considered a painting or drawing. Do not attach objects to the painting or drawing because then the artwork is then considered 3-dimensional artwork, which will be disqualified. We do not accept digital artwork.

Q: Can I add words to my artwork?

A: As long as the phrases are not plagiarized or created digitally, then yes. Keep in mind that words can distract from the art itself. See the *Grading Rubric* (page 14) for more information about how we score your submission.

Q: Can I submit more than one piece of art?

A: No, only one submission per student, please.

Q: What do I get if I win?

A: 1st Place: \$500; 2nd Place: \$350; 3rd Place: \$200 cash prize.

Q: Will I receive a certificate?

A: Yes, all participants will receive a digital certificate.



Q: Do I have to fill out the *Entry Forms* online?

A: No, you may print, fill out by hand, and mail the paperwork with your artwork. Please be sure that your writing is legible – if we cannot read your handwriting, then we will not be able to contact you. Please do not staple or tape your forms to the artwork.

Q: Why do I have to put my teacher down?

A: We want to be able to inform and thank the school for contest winners. It provides us with another point of contact in case we have trouble getting a hold of you or your parent/guardian. You can list an art, science, or another teacher that you currently have a class with.

Q: I'm over 18, do I have to put down my parent/guardian information?

A: Yes, we need multiple points of contact, so we are assured to get a hold of you.

Q: Do you have any other advice for when I create my artwork?

A: Please review the *Grading Rubric* (page 14). We receive many beautiful pieces of artwork; however, they do not always reflect the theme and some are not very unique. Think outside the box and use your own creativity to develop a unique art piece. View past winners to see what types of artwork have won in the previous years. Past participants artwork can be found on our website at www.lof.org/SWBChallenge. Also, make sure to fully research the theme and be sure that it is affectively translated in your artwork. Ask others to critique your idea before you start creating your artwork.

Q: Where can I find resources to learn more about threats to coral reefs?

A: The Khaled bin Sultan Living Oceans Foundation offers education materials for students, teachers, and the general public. There are videos, written descriptions, worksheets, and so much more available for your use. These materials can be found online at www.lof.org/CoralReefCurriculum. The unit about threats will be available soon.



Criteria	5	4	3	2	1
Understanding of Theme 1 to 5 points (each category worth 1 point)	The artist shows an exceptional understanding of the theme of “ <i>Reef SuperSpecies</i> ” and translates that theme effectively into the artwork and written description.	The artist shows an above average understanding of the theme of “ <i>Reef SuperSpecies</i> ” and translates that theme effectively into the artwork and written description.	The artist shows an average understanding of the theme of “ <i>Reef SuperSpecies</i> ” and translates that theme effectively into the artwork and written description.	The artist shows a poor understanding of the theme of “ <i>Reef SuperSpecies</i> ” and attempts to translate that theme into the artwork and written description.	The artist shows no understanding of the theme of “ <i>Reef SuperSpecies</i> ” and does not translate the theme effectively into the artwork and written description.
Elements of Art (Visual components of artwork) 1 to 5 points	The artist has an exceptional understanding of the elements of art, such as line, shape, form, value, composition, and color, and uses them in a successful way to communicate the theme.	The artist has an above average understanding of the elements of art, such as line, shape, form, value, composition, and color, and uses them in a successful way to communicate the theme.	The artist has an average understanding of the elements of art, such as line, shape, form, value, composition, and color, and uses them in a successful way to communicate the theme.	The artist has a poor understanding of the elements of art, such as line, shape, form, value, composition, and color, and does not use them in a successful way to communicate the theme.	The artist has no understanding of the elements of art, such as line, shape, form, value, composition, and color, and does not use them in a successful way to communicate the theme..
Creativity (Artist’s originality) 1 to 5 points	The artist shows an exceptional understanding of the following: • distinctive, individual style • originality and risk-taking • divergent or inventive thinking	The artist shows an above average understanding of the following: • distinctive, individual style • originality and risk-taking • divergent or inventive thinking	The artist shows an average understanding of the following: • distinctive, individual style • originality and risk-taking • divergent or inventive thinking	The artist shows a poor understanding of the following: • distinctive, individual style • originality and risk-taking • divergent or inventive thinking	The artist shows no understanding of the following: • distinctive, individual style • originality and risk-taking • divergent or inventive thinking
Craftsmanship (Artist’s skill & overall neatness) 1 to 5 points	The artist demonstrates exceptional skill and a clear understanding and application of specific medium qualities. Artwork is created and maintained neatly. No tears, smudges, or stray marks.	The artist demonstrates above average skill and some understanding and application of specific medium qualities. Artwork is created and maintained fairly neatly. No tears, minimal smudges or stray marks.	The artist demonstrates average skill and a partial understanding and application of specific medium qualities. Artwork is created and maintained with an attempt at neatness. Artwork may be torn, smudged or have stray marks.	The artist demonstrates poor skill and little understanding and application of specific medium qualities. Artwork is poorly created and maintained. Artwork is torn, smudged, or has stray marks that distract from the image.	The artist demonstrates no skill, understanding, or application of specific medium qualities. Artwork is not finished, was folded, crumpled up, ripped, etc.
Visual Impact (Artwork visually & aesthetically pleasing) 1 to 5 points	The artist portrays exceptional and unique organization of art elements. Content and execution create a striking and memorable work. It has the power to “ wow ” the viewer.	The artist portrays above average organization of art elements. Content and execution create a memorable work. The work has a lasting impact on the viewer.	The artist portrays average organization of art elements. Content and execution create a cohesive work. The work holds the viewer’s attention .	The artist portrays poor organization of art elements. Content and execution create a somewhat cohesive work. There is little impact on the viewer.	The artist portrays no organization of art elements. Content and execution create an incohesive work. There is a negative impact on the viewer.





**Khaled bin Sultan
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