

FLiP-FLoP BEAD PARTY

INSTRUCTION MANUAL

S THAMES & KOSMOS

 Franckh-Kosmos Verlags-GmbH & Co. KG, Pfizerstr. 5-7, 70184 Stuttgart, Germany | +49 (0) 711 2191-0 | www.kosmos.de

 Thames & Kosmos, 301 Friendship SL, Providence, RI, 02903, USA | 1-800-587-2872 | www.thamesandkosmos.com

 Thames & Kosmos VK Ltd, Goudhurst, Kenl, TN17 202, United Kingdom | 01580 212000 | www.thamesandkosmos.co.uk

SAFETY INFORMATION

WARNING.

Not suitable for children under 3 years of age. There is a risk of choking due to small parts that may be swallowed or inhaled. There is a risk of strangulation if long cords become wrapped around the neck. This kit contains sharp needles. Do not injure yourself!

Save the packaging and instructions. They contain important information.

Dear Parents,

With this kit, your child will be able to create his or her own original and individual summertime footwear.

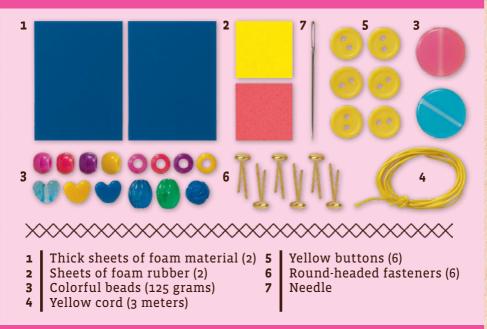
Even though making the sandals is not especially difficult, you should offer assistance to your child. Help him or her work with the needle and thread, particularly when fastening the cords to the bottom of the soles. It is very important for the buttons to sit tightly against the sole and for them to be securely tied on, so they don't become a tripping hazard.

The beaded flip-flops make very nice shoes for wearing in the house, at the beach, or in the garden. As with any light, open footwear, they should not be used on long walks or hikes, in the woods or other rough terrain, while riding a bike or when playing other sports, on playgrounds or around street traffic. As a work surface, a well-lit, sturdy table with an easy-to-clean surface will be appropriate. At the end of the manual, we have included a few ideas for making beads out of recycled household materials. When doing this work, the work area, the floor around it, and all clothing should have added protection, since your child will be working with glue, paint, etc.

Beads that are made out of play dough will have to be hardened in the oven. Please handle this step for your child, or instruct him or her about the correct way to use the oven. Do not let the kit materials get into the hands of small children!

We hope you and your child have a lot of fun with the beaded flip-flops!

KIT CONTENTS



YOU WILL ALSO NEED: 1 pair of good-fitting shoes, felt-tip pen, scissors, ruler, pencil, wax paper or other thin paper, thin cardboard, glue stick, double-sided tape, small stickers

For making beads out of play dough, you will need: 2 cups of flour, 1 cup of salt, ¾ to 1 cup of warm water, 2 tablespoons of cooking oil, bowl, wooden pick, parchment paper, baking sheet, oven, potholder, food coloring dyes or hobby paints, optional: brush, clear water-based varnish

For beads made out of paper, you will need: colorful, shiny paper (such as giftwrap, pages from an old catalog or magazine), ruler, pencil, scissors, glue stick, wooden pick, optional: brush, glitter, clear water-based varnish

Dear Shoe Designers,

Summer is right around the corner! Even if it's still a little way off, it's never too early to start designing your own pair of cool summer sandals. You can wear them in the house any time of year while waiting for the warm summer months to arrive. You will be following in the footsteps of the great shoe designers and all eyes will be turned your way — because your pair of sandals will be the only one of its kind in the entire world.





The first draft

Before you start putting your beaded flip-flops together, think about how you would like them to look.

Begin by studying the beads up close! Try pouring them into a shallow bowl or into the lid of a shoebox. That way, you will be able to see them all really well.



What color do you want your shoes to have? Do



vou want them to be in your favorite color, or a whole bunch of colors? Looks at different bead combinations side by side to see which colors go together best.

Also pay attention to the different bead shapes, and think about which ones you want to use!

Once you have collected a nice selection of beads, lay them all out next to one another. A cloth surface will help keep them from rolling away!

Finally, draw your new bead design onto the sandal straps on the opposite page.



Off you go! Draw your chic design on the straps!





Making

Cutting out the shoe soles

You will need:

1 or 2 thick sheets of foam material, 1 pair of shoes that fit you well, felt-tip pen, scissors

Here's how:

 First make sure that the shoes that you have chosen as your model are ones that fit you well. If your feet are still pretty small (about size 2 or less), place both shoes side by side on the sheet.

If your feet are already too big to fit both shoes on the sheet at the same time, take both sheets and place one shoe diagonally (corner to corner) on each sheet.

Now, look for a thick felt-tip marker and trace the outline of your shoes onto the foam material sheet(s). Be sure to trace the right shoe once and the left shoe once! After all, you won't be able to use two left shoes!



As a final check, try standing barefoot on the outlines you drew. Is there enough room all around? Can you already picture your finished sandals?

2

1

2 Next, carefully cut along the traced outlines with a pair of scissors, and remove the extra foam material. Have an adult help you with this step!

The three strap attachment points

You will need:

Your cut-out foam soles, your feet, felt-tip pen

Here's how:

 Place both feet on the foam sole pieces and use a felt-tip pen to mark the three points shown in the picture to the right.

Be sure that your foot is placed in the center of the foam sole piece before marking the three points, so your sandals are nice and comfortable.

The piece that goes between your toes

You will need:

Extra foam material, yellow cord, needle, 2 buttons, ruler, pencil, scissors

Here's how:

 Cut two rectangular pieces out of the leftover foam material. Ideally, mark them first using a ruler and pencil before cutting. They should be about 1.5 cm long and 1 cm wide. These will become the pieces that go between your toes. Set them upright on the marked spot near the front tip of each sole cutout.

- 2 Now cut a length of cord about 50 cm in length and thread it through your needle. Push the needle lengthwise through the toe piece you just cut, and then through the point you marked on the sole. Pull the cord halfway through the sole.
- 3 Next, you will need a button, which you will thread onto the end of the cord coming out the bottom part of the sole. The best way to do it is to untie the cord from the needle and draw the thread carefully through the two button holes, as shown in the illustration to the right. The button will ensure that the cord doesn't rip through the foam material later on when you're walking.

Control of the the cord through the eye of the needle again, and then insert the needle back through the sole and the toe piece. Be sure that the cord is more or less equally long on both sides, and that the button is lying quite flat against the bottom of the sole.

4

7

- 5 To secure the toe piece, grab a nice-looking bead, pull both ends of the cord through it, and tie them tight beneath the bead so the toe piece stays standing all by itself.
- Then, pull the two ends of the cord through the bead again.
 Repeat steps 2 through 6 with the other sole.

The big bead party

You will need:

Your half-finished sandals, beads

Here's how:

Now for the part you've been waiting for — stringing all the beads onto the cord straps. Take the sketch you drew on page 3 and string each bead one by one onto the cords — and keep stringing them until the pearls reach the spots that you marked on the sole piece to the left and right of where your foot will go.

Once you have finished one, do the same with the other flip-flop.

About foam rubber

The soles of your flip-flops are made of a material called foam rubber. Foam rubber is a general term for a lightweight, squishy solid that can be made of natural latex rubber, polyurethane, polyethylene, or other plastics. It is made using a foaming agent that creates lots of tiny air bubbles in the rubber or plastic before it solidifies. The air bubbles along with the flexibility of the rubber or plastic give the foam rubber its characteristic ability to compress and then spring back to its original shape. For this reason, it is used in countless applications where a material is required to cushion an impact, such as packaging materials, floor coverings, mattresses, workout mats, and shoe soles. Because it is mostly air, it is also buoyant, so it can be used for pool floats and rafts. And, it also dampens sound, so it is used in cars and walls to reduce unwanted noises. The beads in your kit are plastic too — but a harder, denser plastic.

Fastening the strings of beads

You will need:

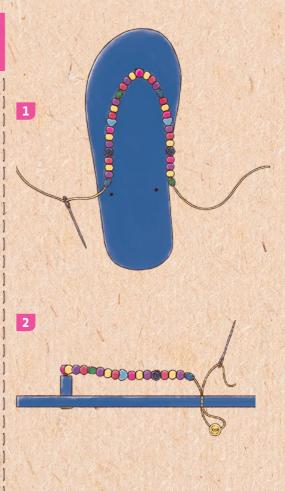
Your half-finished sandals, needle, 4 buttons, scissors

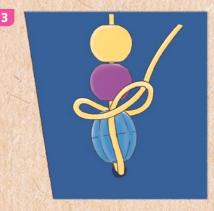
Here's how:

Now you'll need to apply a little skill to sew the cords tightly in place. Thread one of the cords carefully through the eye of the needle and insert the needle through the point you marked.

2 When you come out on the underside of the shoe, pull the cord through a button — just as you did for the part between your toes. The best way is to detach the cord from the needle again. You already know what happens next: Repeat the same procedure on the other side of the flip-flop. Once again, be sure that the button is lying flat against the bottom of the sole.

Finally, tie the cord tightly above the last bead in the string. Do the same thing on the other side, and of course on the other flip-flop as well. Test all the knots to make sure they are holding well, and cut off any extra cord. Now your homemade sandals are done!







Three-row bracelet

You will need:

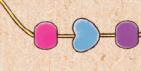
The rest of the cord, ruler, beads

Here's how:

- Grab the cord and cut off a section about 150 cm in length. Have someone help you with the measurement. Then, gather all your favorite beads together. String the first three onto the cord pull them along until they are positioned right in the center.
- 2 Here's where things get a little tricky, so pay attention. Take the left end of the cord (the green part in the picture) and pull it through the center bead and the bead to its right. It's easiest just to look at the picture.









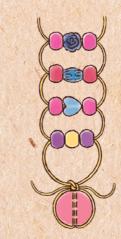
1

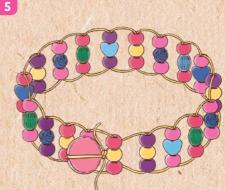
Then, pull the right end (shown in red in the picture) through the center bead and through the bead to its left. Using this technique, you will soon have secured the three beads in the center of the cord, and you can easily string the next rows.

Now it starts getting a lot easier! Take three new beads and string them onto the right end of the cord. Then pull the left end of the cord in the opposite direction through all three beads. Repeat this exact same procedure over and over until the bracelet fits once around your wrist.

4 To make it easy to take off the bracelet whenever you want, you should now add a sort of clasp. To do that, start by taking the two ends of the cord and tying them tightly together above the last three beads. Pull a thick, flat bead over both cords, guide the cords back and tie another firm knot.

5 Now you can carefully cut off any extra cord. Put on your new bracelet and push the thick bead through the first space between the triple rows. You can even adjust your bracelet for size: If it's too big, just use the second or third space.





Foam rubber flowers

You will need:

2 foam rubber sheets, 6 roundheaded fasteners, needle, wax paper or other thin paper, pencil, thin cardboard, glue stick, scissors, ruler, double-sided tape

Here's how:

Lay the wax paper over the opposite page and trace the flowers onto it. Glue the paper onto a suitable-sized piece of thin cardboard and cut out the flowers. Of course, if you prefer you can come up with your own flower shapes, draw them directly onto the cardboard, and cut them out!

2 With the help of your templates, transfer the flower shapes onto the foam rubber sheets and cut them out.

3 Stack the flower cutouts, always placing a smaller one on top of a larger one, and insert a roundheaded fastener through the center. Bend the fastener's prongs apart at the rear side of the flower.

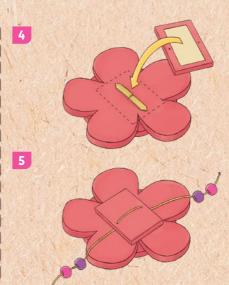
TIP!

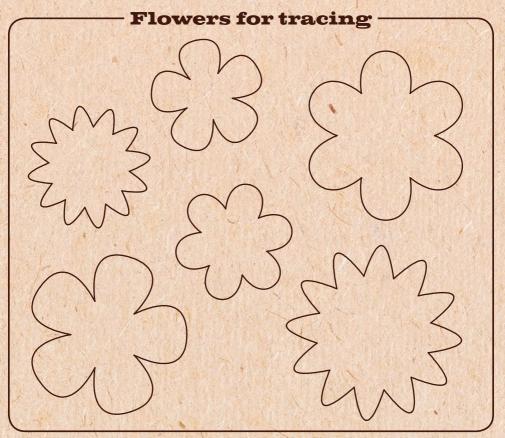
If you fasten a barrette or a safety pin to the rear side, you will be able to use the flowers to decorate your hair or as a brooch! And they will look really great on your sandals. Simply attach the flower with a piece of double-sided tape to one of the large beads, and string it onto the cord.

2

Cut out a piece of foam rubber 2.5 cm by 3.5 cm in size. Use the needle to poke a hole near each of the two long sides. Stick a piece of double-sided tape into the center of the piece of foam rubber. Then press it against the underside of the flower so that the fastener's prongs are completely covered.

5 Now you can run the cord through the two holes and attach the flower to your bead bracelet.





Decorating beads

You will need:

The flat beads, small stickers

Here's how:

You have probably noticed the really cool flat beads in your box. You can put stickers on them to make one-of-a-kind beads in the blink of an eye! Have fun!

Play dough beads

You will need:

2 cups of flour, 1 cup of salt, ¾ to 1 cup of warm water, 2 tablespoons of cooking oil, bowl, wooden pick, parchment paper, baking sheet, oven, potholder, food colors or hobby paints, optional: brush, glitter, clear water-based varnish

Here's how:

1 Cover your work surface with something like a waterproof tablecloth. Mix the flour and salt in a bowl with the oil and some water.

> Knead the dough with your hands and gradually add water until the dough is soft and pliable, but not so much that it is sticky. You should knead the dough well for a total of 10 minutes for all the ingredients to be well mixed.





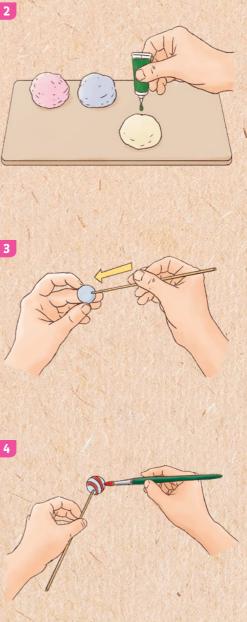
IMPORTANT! Some food color dyes can impart an intense color — including to your skin. Protect your work surface, wear old clothes or an apron, and protect your hands with plastic wrap or disposable plastic gloves.

2 You can either shape the dough right away (and paint it later on) or you can color it with the food colors. Food colors will give you pretty, delicate colors. Divide the dough into several portions, depending on how many colors you want. Add a little food color to each portion and knead the dough. If you like, you can also add a little hobby glitter.

3 When your dough is ready, roll it into little balls with your hands and use the wooden pick to bore holes through them. The beads should not be too big, 1.5 cm at most, or they won't bake all the way through.

Place your beads on a baking sheet lined with parchment paper and bake them for about 1 to 1 ½ hours at 400 °F. **Have an** adult help you!

After your beads have cooled, you can paint them with hobby paints and then coat them with varnish. This step will go especially smoothly if you mount the beads on wooden picks as you paint. The beads made of dyed dough will also look really nice without any varnish. Let the painted beads dry and then string them up!



Paper beads

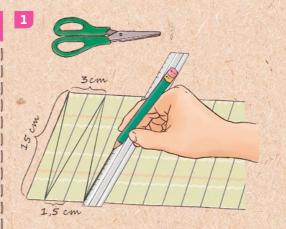
You will need:

Colorful shiny paper (such as giftwrap or pages from an old catalog or magazine), ruler, pencil, scissors, glue stick, wooden pick, optional: clear water-based varnish, brush

Here's how:

- 1 On the rear side of the paper, draw long, narrow triangles, perhaps 3 cm wide and 15 cm long. It's best to draw a reference line every 1.5 cm, as shown in the illustration, to make it easy to draw the triangles between them. Cut out the triangles.
- 2 Take a paper triangle and rub glue onto the rear side of the narrow tip.
- 3 Wrap the triangle around a wooden pick. At the end, the narrow tip of the triangle should lie in the center of the roll. Press the tip onto the roll long enough for the glue to hold well. Then pull out the pick.

Using this technique, you can make as many roll-shaped beads as you like. Let the glue dry completely — and your homemade paper beads will be done!





TIP!

3

You can mount the beads back on the wooden pick and paint them with varnish to make them last longer and look shinier. As soon as the varnish has dried, the beads can be strung up.



Kosmos Quality and Safety

More than one hundred years of expertise in publishing science experiment kits stand behind every product that bears the Kosmos name. Kosmos experiment kits are designed by an experienced team of specialists and tested with the utmost care during development and production. With regard to product safety, these experiment kits follow European and US safety standards, as well as our own refined proprietary safety guidelines. By working closely with our manufacturing partners and safety testing labs, we are able to control all stages of production. While the majority of our products are made in Germany, all of our products, regardless of origin, follow the same rigid quality standards.



1st Edition 2014 © 2014 Franckh-Kosmos Verlags-GmbH & Co. KG

This work, including all its parts, is copyright protected. Any use outside the specific limits of the copyright law, without the consent of the publisher is prohibited and punishable by law. This applies specifically to reproductions, translations, microfilming, and storage and processing in electronic systems and networks. We do not guarantee that all material in this work is free from copyright or other protection.

Idea and concept: Andrea Kern

Project management and editing: Kristin Albert Text: Jessica Stuckstätte, Hamburg Technical product development: Elena Ryvkin

Manual layout: Michaela Kienle, Fine Tuning, Dürmentingen

Manual illustrations and photos: artenot, p. 2 center, back cover bottom right; StudioSmart, p. 3 (background); oksix, p. 10 center right; oksana2010, p. 14 center right (all previous © shutterstock com); Michael Flaig, Pro-Studios, Stuttgart, cover center, p. 1 top center; artenot, cover center right, bottom center, p. 1 lower right, 2 lower right, 8 center right, 12 bottom right, 16 bottom right (© shutterstock com, edited by Michaela Kienle); Michaela Kienle, p. 3 top left, top right, bottom center; Bianca Meier, Hamburg (all experiment illustrations and p. 3 center)

Packaging design concept: Peter Schmidt Group GmbH, Hamburg

Packaging layout: Michaela Kienle, Fine Tuning, Dürmentingen

Packaging illustrations and photos: Gemenacom (Polaroid frame); Seregam (tape) (both © shutterstock.com); artenot (creature with paintbrush, © shutterstock.com, edited); artenot (all other creatures, © shutterstock.com, edited by Michaela Kienle); Michael Flaig, Pro-Studios, Stuttgart (title image, materials); Matthias Kaiser, Stuttgart (Polaroids)

The publisher has made every effort to locate the holders of image rights for all of the photos used. If in any individual cases any holders of image rights have not been acknowledged, they are asked to provide evidence to the publisher of their image rights so that they may be paid an image fee in line with the industry standard.

1st English Edition © 2014 Thames & Kosmos, LLC, Providence, RI, USA Thames & Kosmos® is a registered trademark of Thames & Kosmos, LLC.

Editing: Ted McGuire; Additional Graphics and Layout: Dan Freitas, Ashley Greenleaf

Distributed in North America by Thames & Kosmos, LLC. Providence, RI 02903 Phone: 800-587-2872; Email: support@thamesandkosmos.com

We reserve the right to make technical changes.

Printed in Germany / Imprimé en Allemagne