

LESSON 3: PERIOD PRODUCT TESTING

Overview: Pupils experiment with all types of period product, comparing the pros and cons of each

Great For: Increasing familiarity with products; thinking about the costs associated with period products; getting your hands dirty!

Resources Needed:	See below
Prep Time Needed:	15 mins
Works best in:	Classroom or science lab – this will get messy(!)
Number of participants:	Full Class; split into groups of 5 or 6
Time Needed:	120 minutes – we highly recommend taking a double lesson for this activity, or splitting it over two sessions. Option to create a third lesson looking specifically at product design as part of Design Technology or Science lessons
Set Up:	See below. Familiarise with reusable period products before you start.

All ages

Learning Outcomes:

Pupils know and can describe how to prepare for and manage periods and are aware of all the available options, including reusables.

Who is this for: *This lesson should take place once students have a good working knowledge of puberty and what a period is. You may wish to take the students into the science labs for the first set of experiments.*

Resources:

Each group will need:

- A beaker and/or measuring jug
- A 'squeeze sauce bottle'
- 'Blood' – a mix of black current squash and tomato sauce works well; or tomato juice
- One disposable pad per pupil – take them out of the packaging so they are not branded. (Please ensure a variety of brands, mix of wings /no wings, day /night, different absorbencies)
- One tampon per pupil – take them out of the packaging so they are not branded. (Please ensure a variety of brands, mix of applicator (plastic and cardboard), non-applicator; different absorbencies)
- [If possible] One menstrual cup, one reusable pad, and one pair of period pants per group

LESSON 3: PERIOD PRODUCT TESTING

NB: this lesson requires a lot of resources, but most of them can be reused with every class. Disposable products can be found inexpensively in pound shops or by using supermarket own brands. It is important to buy a range of brands so that pupils can see the variety of products available on the market. This a hands-on, fun exercise that is worth doing if possible – especially with male pupils, who are otherwise unlikely to be given an opportunity to touch or see period products

Set Up

Make some blood – mix black current squash and tomato sauce and stir well.

Pour some blood into each squeeze bottle.

Take period products out of their boxes/packaging, and put into two large bags so you have a mix of single-wrapped pads in one bag, and a mix of individually wrapped tampons in another. This way they are unbranded.

Introduction

5 minutes

Introduce the topic to the class

Establish ground rules (see Teachers' Guide)

Remind the class that periods can be a sensitive topic

You may want to emphasise that this class is intended to be fun and messy, but that students need to respect some boundaries

Starter Activity

10 minutes

Explain that today we will be exploring the products available to people on their periods and evaluating them to create top trump cards

Ask students to name the products that they are aware of – you can do this as a shout out exercise, or ask pupils to write /draw them privately first

Ask pupils to come up with different metrics to measure and compare products e.g. comfort, design, ease of use, absorbency, cost, environmental impact (there may be others)

Ensure each pupil has a place to jot down their scores for each product during the messy phase of the experiment (e.g. scrap paper, personal whiteboards)

Activity 1:

Wet Experiments

60 minutes

Explain that the main tests are to explore how each product works. The following experiments are messy. We encourage pupils to have fun, and welcome jokes / laughter as long as they are positive and don't disrupt the learning of others.

Take pupils through the following practical experiments (see full instructions below):

Part 1: Blood Loss

Part 2: Disposable Pads

Part 3: Tampons

Part 4: Reusable Products

Part 5: How are they made?

NB: Part 5 could be expanded to create a whole lesson in itself and link up with the science / design technology curricular

LESSON 3: PERIOD PRODUCT TESTING

Allow time for questions before clearing up

Remind pupils that disposable products should never be flushed down the toilet – they clog the water ways and may end up in the ocean

Activity 2: Dry Experiments Explain that the final two tests are to assess the cost of each product, both financially and environmentally.

20 minutes Take pupils through the final two experiments (see full instructions below):

Part 6: Financial Costs

Part 7: Environmental Costs

Part 8: Health Costs – optional

Activity 3: Top Trumps Working in groups ask pupils to create a pack of top trumps for their products, naming them at the top and drawing them if there is time. To save time, it may be useful to divide the labour between each group of 6 so that each pupil only makes one card.

20 minutes

Write out the categories agreed e.g.:

- Comfort
- Ease of use
- Absorbency
- Cost - financial
- Cost - environmental
- Any others the class has decided if appropriate

Enter the findings under each heading, for each type of product. Ask pupils to discuss what scores they feel each product deserves overall – as pupils will have tested different brands of product they may have different scores from their peers.

The class can use their cards to play top trumps, either in pairs, groups or as a whole class asking for two volunteers each time.



THERE ARE A RANGE OF
PRODUCTS AVAILABLE
TO HELP YOU
MANAGE YOUR
PERIODS

Plenary Ask the class to reflect on what they have learnt about different products

5 minutes

Remind the class that everyone is different, everyone has their own preferences, not everyone has access to all this choice and to be respectful of others' opinions and choices

LESSON 3: WET ACTIVITIES: HOW TO

PART 1: EXPERIMENT INTRODUCTION - BLOOD LOSS

Begin by making sure that each group has a squeeze bottle full of 'blood'. Either allow pupils to mix their own, or hand out pre-prepared blood which will save time (and mess!)

At the front of the class, ask pupils how much blood they think someone loses while on their period. Ask each group to squeeze out how much blood they think is lost from their bottle to their empty beaker

At the front of the class, show pupils how much blood is actually lost. Most people lose between one and two eggcups full of blood – 30-60ml. This figure is confusing as it doesn't take into account everything else that comes out as part of menstrual flow including cervical mucus, clots, uterine lining and other tissue. By some accounts blood makes up only 30-40% of menstrual flow, so people should not be surprised if it looks more like 100ml.

As you explain this, pour out all three amounts (30ml, 60ml and 100ml) for comparison. There has been remarkably little research on this topic, so it's a grey area. No human is the same so flow can vary considerably. Ask pupils whether this seems like a lot or a little.



KEY POINT

Anyone experiencing very heavy bleeding (menorrhagia) should see a doctor. This is defined as 80ml of blood (so 200+ml in total). Or, in practice, someone who:

- soaks through more than one tampon, pad, or cup per hour for several hours
- needs to use double protection to prevent leaks
- bleeds for longer than seven days
- passes blood clots larger than a 10p piece
- has to restrict daily activities because of their period
- experiences signs of anaemia

R A D

LESSON 3: WET ACTIVITIES: HOW TO

PART 2: DISPOSABLE PADS

Show the class a disposable pad and explain how it works (see info on page 11). Unwrap it and show the sticky strip which attaches it to underwear. Point out the wings.

Hand out one disposable pad to each pupil. Try and ensure that for each table or group, pupils have a range of different brands / sizes to compare with their neighbours

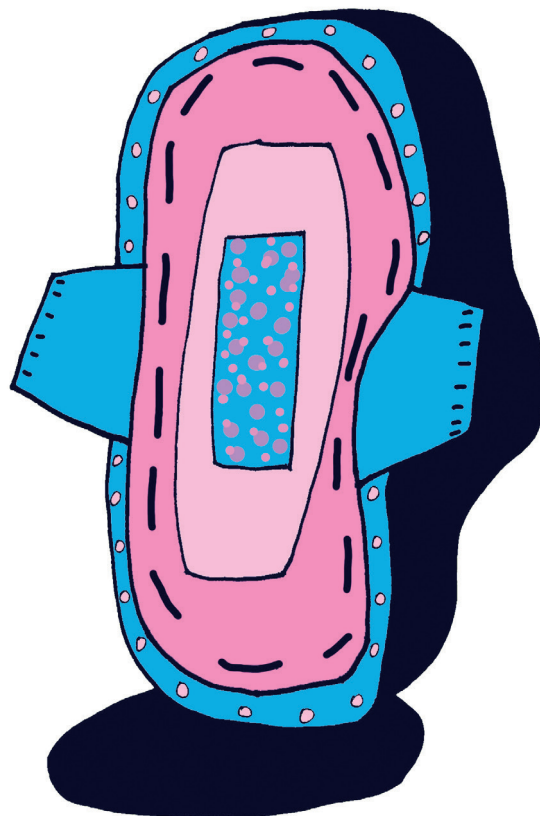
Ask pupils to unwrap the pad and stick it to their desk

Ask pupils to score their pad on the factors previously agreed – e.g. comfort, design etc. and record their score out of 5.

At the front of the class demonstrate dripping blood onto a pad. Talk about how period blood does not flow out like having a pee, it drips out slowly a bit at a time.

Allow pupils to experiment with how much blood their pad can contain. Ask pupils to slowly drip blood onto the pad (using a squeeze bottle) until just before it is saturated. They will need to wait a little while it is absorbed.

[If you have syringes / measuring jugs] Tell the groups to draw up 10mls of their “blood” into the syringe. Ask the groups to make notes on how much “blood” their pad could absorb without leaking, in millilitres.



NB: There is likely to be a lot of giggling and mess. This is ok, in fact it is encouraged. It's really important that all pupils, including boys, get to play with period products so they feel more normal and less scary.

LESSON 3: WET ACTIVITIES: HOW TO

PART 3: TAMPONS

Show the class a tampon and explain how it works (see info on page 11). Show the difference between an applicator tampon and a non-applicator tampon. Explain how to insert one. Talk about Toxic Shock Syndrome – highlight this is a very rare illness that is nothing to worry about provided you never wear a tampon for more than 8 hours - 6 is safer (see below).

Answer any questions about tampons that arise at this point

Hand out one tampon to each pupil. Try and ensure that for each table or group, pupils have a range of different brands / sizes / applicators to compare with their neighbours

Ask pupils to unwrap the tampon and score it on the factors previously agreed – e.g. comfort, design

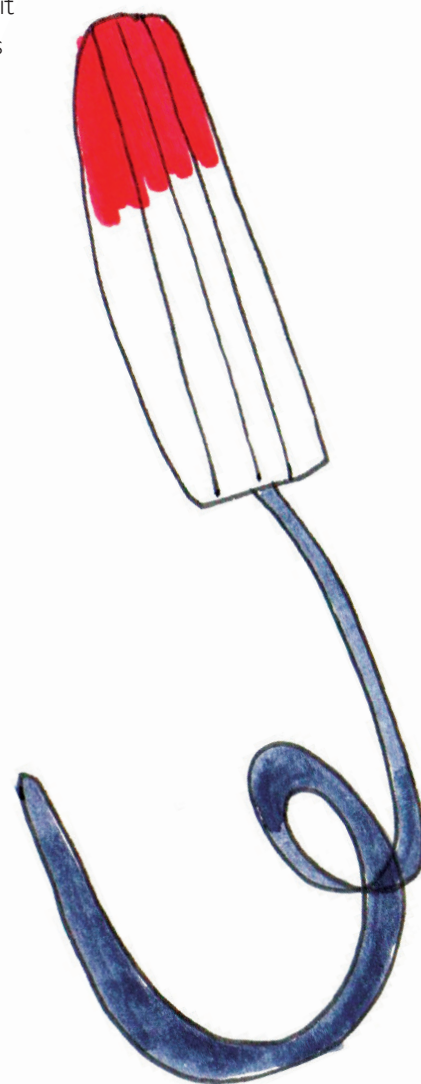
At the front of the class, using a squeeze bottle or a syringe, demonstrate blood dripping onto the top of a tampon. After a few drips it will begin to resemble a tampon as it might look after you have removed it. Also show pupils what happens when you dip a tampon in a beaker of liquid (it will expand considerably). Point out to pupils that they are unlikely to bleed a beaker full of water, so fully saturated tampons are not real to life

Allow pupils to experiment with their tampons and 'blood'

[If you have syringes/measuring jugs] Ask pupils to measure how much blood their tampon can absorb before it is saturated and record in millilitres.

KEY POINT

Many people flush pads, tampons, applicators or wrappers down the toilet out of shame and embarrassment. Remind pupils to always put products in the bin provided and if there is no bin in the cubicle, wrap them in loo roll and take them to the nearest bin. This is totally normal.



LESSON 3: WET ACTIVITIES: HOW TO

PART 4: MENSTRUAL CUPS, REUSABLE PADS & PERIOD PANTS

If available, show pupils an example of each of these products. If you do not have access to the products themselves, don't worry, but please do ensure that you tell pupils that they exist. Show photographs if possible. Talk through how they are used (see info on page 12-13) and allow pupils to touch and feel each product, before experimenting (if time) with adding 'blood'.

KEY POINT

There are a huge range of products available to people on their period. Everyone is different and people will choose products that suit them best. Almost everyone starts their period by using pads – moving on to tampons and other products when they get a bit older. Tampons and Cups can be difficult to insert, and no one needs to feel worried about them – they are there when people are ready.

For very good environmental reasons, many people support the increased uptake of reusable products in the UK - or at least the purchase of non-plastic disposable products. For some lower income households this is not a viable option. Not everyone has access to the same financial resources or has the appropriate washing facilities at home.



LESSON 3: WET ACTIVITIES: HOW TO

PART 5: HOW ARE THEY MADE

Invite pupils to deconstruct their pads and tampons to discover how they are made. You should compare dry products with wet products.

Most tampons are made of rayon (a synthetic material) and wrapped in plastic. Some tampons are made of organic cotton.

Tampons are constructed in two main ways:

The swiss roll. A long strip of cotton is folded and then rolled. The string is looped around the cotton so it will not come out. When unrolling a tampon, you may find that they have a thin plastic membrane wrapped around them to ease insertion and unwrapping. (This looks a lot like the webbing used to turn up trousers)

The butterfly. These tampons are folded like a butterfly and sewn. When wet they expand sideways, and also are often wrapped in a plastic membrane – this is partly to stop whisks of rayon detaching inside the vagina



Ask pupils to deconstruct their tampon and compare it to their neighbours.

Most Pads are constructed using several layers of material:

- The top layer absorbs but then 'locks in' the blood, to keep you dry
- The middle layers contain a Super-Absorbent-Polymer – a powder when dry, but transforms into balls of gel when in contact with liquid. For most products, this will be a synthetic material, for some it may be made naturally (e.g. corn fibre)
- The bottom layer (often made of plastic) prevents any liquid passing through to the underwear

Cut both a dry and a wet pad in half and compare. When wet, the Super-Absorbent-Polymer in the middle will have transformed from a white powder into balls of gel (likely pink because of the blackcurrent squash). Encourage pupils to touch and feel each layer of a wet and dry pad

[Optional] Invite pupils to think about product design, absorbency and what materials are used. This video is old, but is still instructive in describing how pads are manufactured:

<https://www.youtube.com/watch?v=MktPFhY52Hk>

NB: This could be a whole lesson in itself and link up with the science / design technology curricular

Allow time for questions before clearing up

LESSON 3: DRY ACTIVITIES: HOW TO

PART 6: FINANCIAL COSTS

Hand out calculators (or ask class to get their own)

Put up the Financial Costs (see below) on the whiteboard – or ask class to research costs of different products themselves.

Ask groups to calculate the average cost per period over 5 years, assuming 13 periods a year. Compare the cost of different products and ask groups to score each product for affordability

Ensure you note to the class that not everyone can afford or is able to choose particular menstrual products, and some people cannot afford to buy them at all.

These are average costs, for guidance only. Depending on how heavy their period is, women use between 20 and 24 disposable products per period. Remind the class that within each product category there will be some variation in price:

Pads	£3.50 for pack of 10
Pads (plastic-free/organic)	£3 - £5 for pack of 10
Tampons (applicator)	£2 - £3 for pack of 10
Tampons (non-applicator)	£1.50 - £2.50 for pack of 10
Tampons (organic)	£2 - £3.50 for pack of 10
Menstrual cup	£9 - £30 – one needed (lasts 5-10 years)
Reusable pads	£8 each – 8 needed (lasts about 5 years)
Period underwear	£30 each – 4 needed (lasts about 3 years)



HOW
MUCH?

LESSON 3: DRY ACTIVITIES: HOW TO

PART 7: ENVIRONMENTAL COSTS

Show the class this information video by charity City to Sea about plastic pollution caused by menstrual products https://www.youtube.com/watch?v=lsJjUzN_I2o

Ask groups to consider the environmental impact of each product, taking into account manufacturing, disposal and washing costs, as well as materials used. Ask them to give scores to their products

There are plenty of estimations of the costs of period products, some include:

- The average person uses approximately 11,000 disposable pads and/or tampons in a lifetime
- Disposable products (including packaging) create more than 200,000 tonnes of waste per year
- The Marine Conservation Society estimates that 1.5 - 2 billion period products are flushed down the toilet each year
- A 2010 beach clean found an average of 23 pads and 9 tampon applicators per kilometre of British coastline

For more information, see the Women's Environmental Network <https://www.wen.org.uk/whatsentheproblem/>



WRAP IT
AND BIN IT -
NEVER FLUSH IT!

PART 8: HEALTH COSTS - OPTIONAL

You may wish to mention potential health costs as well. In the UK, period product manufacturers are not obliged to list the ingredients for their products. Many products are bleached white and these chemicals, along with the synthetic fragrances in some pads can cause skin irritation. Some people are concerned that fibres from rayon tampons can flake off and stay within the vagina – potentially increasing the likelihood of Toxic Shock Syndrome (TSS). This is a grey area which has been under-researched.

Explain to pupils that if properly used, there is a low health risk for all products. Some will suit people better than others for a range of reasons. Reiterate that TSS is extremely rare.

LESSON 3: INFORMATION FOR TEACHERS

DISPOSABLE PRODUCTS

Disposable Pads come in many shapes and sizes, with different absorbencies. Encourage pupils to try out different options. They are made of different materials – cotton, or corn-fibre pads are available, but many mainstream brands are manufactured with plastic. Some pads are bleached or fragranced which can cause irritation.

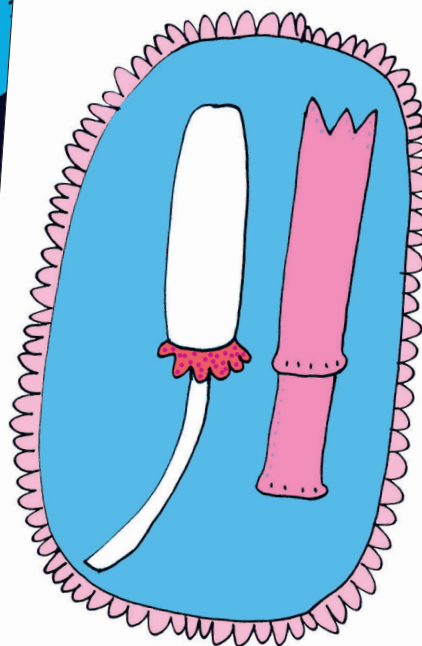
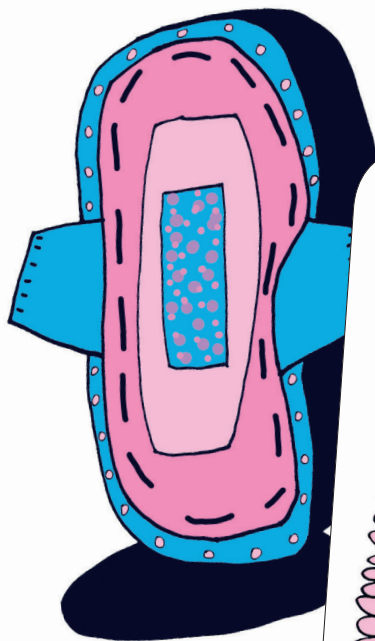
Pads stick inside your underwear and some have wings to make them more secure. People often wear longer, bigger pads at night and just after they have had a baby.

Change your pad every three to six hours. Wrap them in tissue, an empty wrapper or a disposal bag and then pop them in the bin (not down the toilet).

Tampons sit inside the vagina and are more convenient for swimming and other exercise than pads. They come in different absorbances for light to heavy flow - mini, regular, super and super plus. Some are inserted into the vagina with your finger and others come with applicators, made from either cardboard or plastic. These are inserted into the vagina and the applicator end is pushed to insert the tampon, then the applicator is pulled away leaving the tampon inside. Some applicators come ready to use, others need a quick pull to activate them. All the wrappers, applicators and the tampons themselves must be disposed of in a bin and never down the toilet.

Tampons come with instruction leaflets with diagrams of how to insert them. It takes a bit of practice! If you're unsure of how long to leave the tampon in at first, each time you go to the toilet give the string a gentle tug. If the tampon slides out easily and is completely soaked in blood it's time to change. If it doesn't move, it's probably not fully absorbed and so can be left in a bit longer, and may be painful to remove if it is still dry. Also keep an eye on the string each time you go to the toilet, if you can see red at the top of the string near your vulva it's definitely time to change or you may risk leaking.

Most tampon manufacturers state their tampons can be left in for up to 8 hours, but changing a tampon every 3 to 6 hours is best, to avoid risk of Toxic Shock Syndrome (TSS). Always use the lowest absorbency for your flow.



LESSON 3: INFORMATION FOR TEACHERS

Toxic Shock Syndrome (TSS) is a rare but serious illness. It is a bacterial infection associated with the use of tampons. Many young people worry about using tampons because of TSS. Reassure them that the chances of infection are very small, but also reiterate advice to always use the lowest absorbency for your flow and change them at least every 8 hours.

TOXIC SHOCK SYNDROME
ONLY ONE IN 100,000!

KEY POINT

Many people flush pads, tampons, applicators or wrappers down the toilet out of shame and embarrassment. Remind people to always put products in the bin provided and if there is no bin in the cubicle, wrap them in loo roll and take them to the nearest bin. This is totally normal.

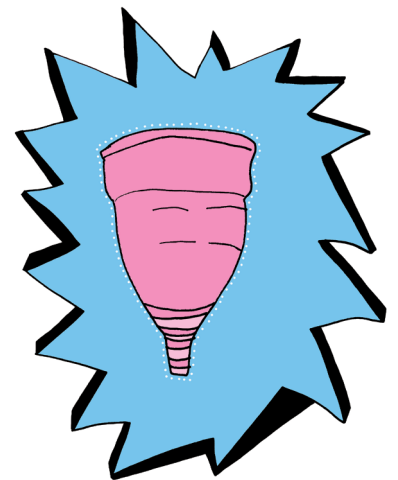
REUSABLE PRODUCTS

Menstrual cups are bell-shaped devices that sit inside the vagina (like a tampon) and collect period flow. Until recently, they have been relatively unknown, despite being invented in 1937.

Cups are made from silicon, and are folded to insert into the vagina. They form a light suction with the vaginal walls holding them in place, before being emptied and reinserted. Many people find them more comfortable than tampons, and they are suitable for a range of activities (including swimming).

Cups can be worn for up to 12 hours – they hold more blood than a tampon, and cause less vaginal dryness than tampons. There is also less risk of TSS. Cups should be rinsed or wiped between each use, and sterilised at the end of each period.

The upfront cost of cups is higher than other products, but they can be used for up to ten years, presenting large environmental benefits. There is lots of information and support online about using menstrual cups, including choosing the right one for you and guidance on cleaning and usage.

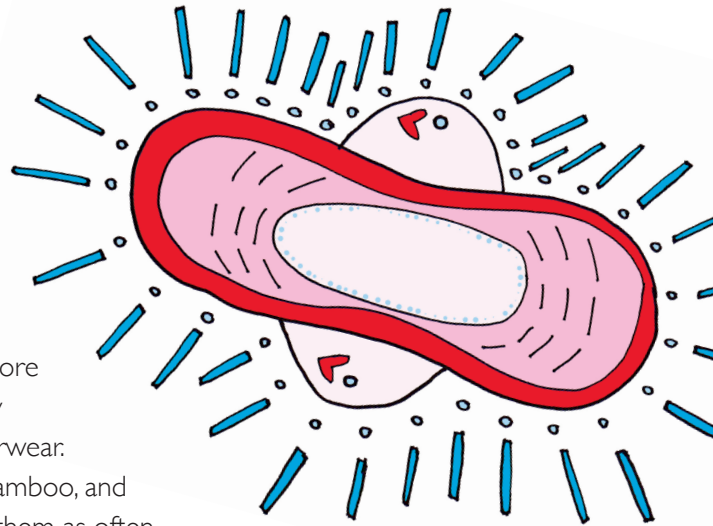


LESSON 3: INFORMATION FOR TEACHERS

Washable pads (aka reusable pads or cloth pads) are available in different sizes, styles and absorbencies.

Most have wings, with poppers that fasten around the gusset of underwear. They are slightly thicker than most disposable pads as they don't have the gel inside but instead rely on absorbing the blood in their material layers. People often find them more comfortable than disposable pads as they are softer, more like the material of underwear.

They can be made of cotton, fleece or bamboo, and it is possible to make your own! Change them as often as you'd change a disposable pad and soak or rinse them in cold water before putting them in your normal wash. If you want to use them out and about, they often come with a small waterproof bag that will keep them safe till you get home and can rinse or soak them.



Period pants are like normal underwear but are made of special absorbent fabric. Period pants come in a range of shapes and styles, including boxer shorts. Depending on the type, they can last up to 8 hours. After use, soak them in cold water before popping in with your normal wash.

