When is it the right time to introduce my kids to a new significant other?

There is no "right" time. Wait until the divorce is final at least. There is no hurry for this. Depending on their ages, it can have difficult consequences. A very young child will bond easily with any adult you bring into their world. However, if the relationship doesn't work out, the child will be sad and grieve the loss. If this happens often, the child learns to not trust adults to stick around. Be sure it is a solid relationship before introducing your child. Older kids may worry the new person might take the parent's love away or your attention will have to be divided. Get them on solid ground with you first before introducing this worry. Teens and young adults should be expected to be cordial but should not be expected to "love" your love interest, nor should they be expected to view them as a parental figure. They are just some guy/gal in their parent's life. A conversation about respecting their role will take place later when the partner becomes an official part of the family.